

Monroe County Energy Challenge Energy Plan

November 2014



To reduce energy use in a meaningful way,
energy efficiency needs to be accessible to the average community.

Monroe County does not yet have ambitious net-zero energy goals, has an average amount of resources available, and has an average level of energy expertise. We have created this plan for the other average communities out there in hopes that, together, we can make an extraordinary impact.

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Executive Summary

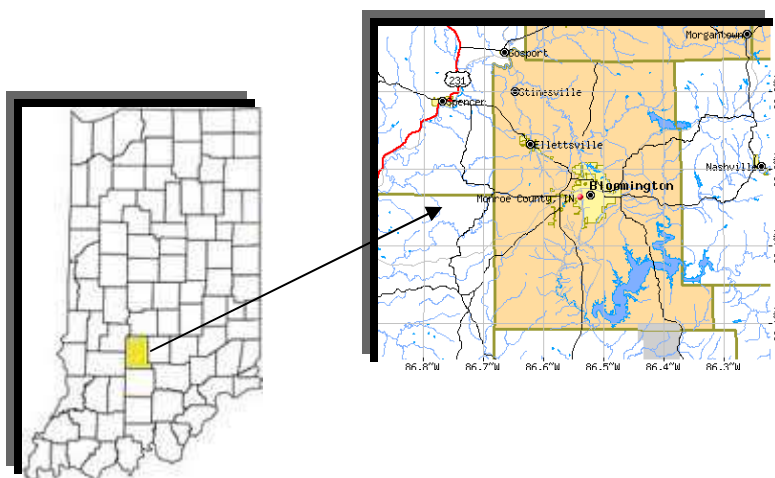
Monroe County, Indiana is located in south central Indiana and is urban, rural, agricultural and forested. The County is home to Lake Monroe – Indiana’s largest inland lake, a huge creative hub for artists and musicians, home of Lotus World Music Festival, Little 500; unparalleled natural beauty where one can find 200 established trails; organic farming and so much more. The county seat is Bloomington, which has a small town feel with many amenities typical of a large metropolitan area – arts, music, theatre, etc.

Monroe County has a large footprint and as a result has four utilities that are partnering in the Energy Prize competition. All towns and cities within the county footprint are partnering in the Energy Prize competition – this includes Monroe County Government, the Towns of Ellettsville and Stinesville and the City of Bloomington.

There are two school systems in Monroe County as well as many private and charter schools participating in the project. The schools are increasingly energy-conscious, active in implementing energy efficiency improvements on their own premises, and effective in teaching students and their families the fundamentals of good energy usage.

This plan was developed in response to the Georgetown University Energy Challenge. Using a simple, step-wise approach, this plan aims to mobilize individuals and organizations across the community. Each participating entity was asked to either draw on existing goals or create new goals as part of the Challenge, and those goals range from 5 percent per year to 15 percent over the course of the competition. Municipal strategies will vary by entity. Residential strategies will use many avenues to engage the community, but will center on implementing the Task of the Month program with the help of organizations across the community, and an EnergyMobile to reach as many residents as possible.

MCEC has developed goals and strategies to involve every sector of the community. We will track utility spending, develop curricula in conjunction with area schools, partner with Indiana University faculty and students and Ivy Tech Community College, create contests, and communicate with everyone in the community regarding the potential for energy efficiency.



Energy Vision

The City of Bloomington, Monroe County Government, and towns of Ellettsville and Stinesville as well as schools throughout the community envision an energy future where dependence on fossil fuels is minimized, and the community is served by a diverse portfolio of renewable energy sources, an efficient and smart power grid, a system of distributed generation, a diverse and balanced transportation system, by smart, forward-thinking energy policies and practices, and by a proactive and involved public.

Through engaged participation in the Monroe County Energy Challenge, our local community will realize many positive benefits. Impacts will include a healthier environment, a more stable and efficient energy system to support local economic activity, reduced dependence on distant sources of energy, a greater proportion of local dollars retained in the local economy, and a healthier population with more equitable access to local resources.

We will achieve this vision by pursuing the sector-specific goals and strategies outlined below.

Energy Plan

The Monroe County Energy Challenge Plan (the Energy Plan) is a broad, evolving document focused on helping the Monroe County community realize its energy vision. The Monroe County Energy Challenge was created in response to the Georgetown University Energy Prize, a nationwide competition to increase energy efficiency in communities with populations between 5,000 and 250,000.

In this initial phase (2015-2016), the Energy Plan will focus specifically on reducing consumption of metered electricity and natural gas in the residential and municipal sectors in Monroe County through outreach and education, incentives (including multiple existing programs), and technical assistance. During this phase, the community will develop additional energy goals and strategies in other sectors to reduce fossil fuel dependence over the long term.

Context

The Monroe County community is served by several energy utilities. Duke Energy, the South-Central Indiana REMC, and the Utilities District of Western Indiana provide the vast majority of residents with electric service. Vectren supplies natural gas county-wide.

In the major population centers of the county (Bloomington and Ellettsville), residential energy consumption accounts for just over one-third of electricity use and roughly 45% of natural gas use.¹ In 2012, local residences used 10,627 kilowatt-hours (kWh) of electricity per meter, slightly lower than the average household use in the region.²

¹ This includes data from Duke Energy and Vectren, which track data by urban areas and zip codes, respectively.

² http://www.eia.gov/consumption/residential/reports/2009/state_briefs/pdf/il.pdf

The vast majority (90%+) of electricity is generated in coal-fired power plants. To reduce dependency on coal-based power and transition to cleaner sources of energy, the community is proposing the sector-specific goals and strategies outlined below.

Residential



Goals

- Reduce per-meter, weather-normalized energy consumption from the 2013-2014 baseline by 10% by the end of 2016.
- Interface with 80% of Monroe County's 53,894³ households through education programs, school curriculum, and other outreach, and obtain energy reduction commitments from 20% of households.
- Set the stage for long-term energy efficiency through new or enhanced community policies.

Strategies

Goal #1: Reduce per-meter, weather-normalized energy consumption from the 2013-2014 baseline by 10% by the end of 2016.

The residential plan will prioritize implementation of a few simple, effective actions in a larger number of households rather than intensive upgrades in fewer households. Households interested in going above-and-beyond these priority actions will be encouraged through education and technical assistance to improve their efficiency further.

For property owners

Based on cost savings estimates, priority actions for owner-occupied homes are:

- Insulating and sealing attics and ducts;
- Sealing large air leaks;
- Installing and using a programmable thermostat;
- Air-drying clothes in summer and washing clothes in cold water;
- Replacing incandescent bulbs with CFLs, LEDs, or other more efficient bulbs; and
- Educating homeowners of the connection between water use and energy use in the home, and encouraging water use reductions that will result in decreased energy spent heating and treating water.

The community will face a particular challenge in improving efficiency in residences because nearly 50% of its housing units county-wide are rentals, including two-thirds of the housing units within the city of Bloomington. For this reason, we have developed rental-specific strategies, outlined below.

³ According to the American Community Survey for 2012.

Rentals

We will focus on efficiency in rentals both through landlords/property managers and through tenants.

For landlords and property managers, the focus will be on:

- Green lease programs,
- Green landlord/green rental certification or rating program,
- Continuing to develop a rental website that highlights green features and utility costs in addition to basic rental information,⁴
- Basic equipment maintenance,
- Installation of programmable thermostats,
- Information on rebate/incentive opportunities,
- Point of sale requirements for energy efficiency.



Based on cost savings estimates, priority actions for tenants are:

- Setting thermostats at appropriate set points for heating, cooling, and unoccupied periods,
- Replacing incandescent bulbs with CFLs, LEDs, or other more efficient bulbs,
- Air-drying laundry and washing laundry in cold water,
- Ensuring windows and doors are closed and latched and storm windows are closed in the winter; drawing draperies or closing blinds for added insulation,
- Finding and stopping air leaks (e. g. using plastic sheeting on single-pane windows, caulk, expanding foam, etc.),
- Turning off lights, appliances, and equipment when not in use and turning off power supply to electronics to reduce standby power consumed when not in use,
- Making requests to landlords to take high-priority actions (basic maintenance such as furnace filter replacement, programmable thermostats, insulation, air sealing, etc.).



Goal #2: Interface with 80% of Monroe County's 53,894 households through education programs, school curriculum, and other outreach, and obtain commitments from 20% of households.

Outreach for residential programs will focus on both outreach to individual households and outreach through existing organizations with particular focus on the *Task of the Month* program (see Appendix I), described in detail below.

We will invite households to sign a pledge to reduce their energy consumption by at least 15%. Participants will also be asked to post a yard sign at their residences stating that they are taking part in the Monroe County Energy Challenge.

⁴ The RentRocket project, outlined at http://bloomington.in.gov/documents/viewDocument.php?document_id=7405

Individual household outreach

Outreach to individual households, with a focus on the priority actions outlined in Goal #1, will use the following strategies to encourage improvements.

- Provide free or low-cost energy assessments. The City will offer free energy assessments through its Beat the Meter Blitz program, and MCEC partners will connect local residents to alternative resources, including utility-provided assessments and the local community action program.
- Offer “A-la-carte” assessments that would allow individuals to pay on an a la carte basis for different components of an energy assessment rather than paying a flat fee that could be prohibitive. For example, residents could pay \$25 for thermal camera images or \$25 for a blower door test through partnering energy management companies. These types of assessments could be scheduled in bulk through neighborhood associations, by posting flyers door-to-door, tabling at the Farmers Market and other local events, etc.
- Utilize trained volunteers to take thermal images using available cameras.
- Deploy an EnergyMobile to targeted neighborhoods. This vehicle will be stocked with weatherization and energy efficiency materials, and will be deployed to specific neighborhoods along with energy teams, who will go door-to-door to identify and install energy efficiency measures, recruit candidates for bulk purchases of insulation and other services, and process paperwork for utility rebates.
- Encourage consultations using trained energy counselors.
 - Provide owners with detailed information on existing incentives and lists of approved contractors through Duke Energy and Vectren, and call to schedule appointments.
 - Organize discounts for bulk purchases of energy efficiency materials or services.
 - Identify priority areas for attention.
 - Ask homeowner to sign a pledge to address issues identified as a priority.
 - Assist with rebate paperwork.
 - Work with the EnergyMobile as needed.
- Sponsor drawings and contests.
 - Offer prize drawings to households that have insulated the attic or walls during a predefined period.
 - Incentivize neighborhood or apartment building energy challenges.
- Make outreach materials available.
 - Facilitate the creation of how-to videos aimed at renters and homeowners.
 - Make available stock photos showing dos and don'ts of modeling energy efficiency.
 - Utilize standard social media, newsletters, and other outreach language that can be shared by property managers, landlords, neighborhood associations, and others at appropriate times.
 - Produce yard signs that announce “This is a Green House” for those families that participate in the program.
- Co-sponsor events such as *Caulk of the Town* (that can be coordinated with the October “Task of the Month”), efficiency “barn raisings,” or other events that create teams to implement energy efficiency steps in specific neighborhoods.

Organizational outreach

We will rely heavily on existing organizations, with a particular focus on building on the *Task of the Month* program. This program focuses on one energy efficiency-related action per month, and draws on existing social networks (such as faith communities) to assist residents with implementation. This program was developed by Earth Care Bloomington, an organization bringing together Hoosiers of faith to help curb global climate change, and implemented by Hoosier Interfaith Power & Light – a state-wide organization that seeks to inspire and equip Hoosiers of faith to respond to climate change.

While the Earth Care program was originally developed for faith communities, the priority improvements, outreach materials, and other program elements can be adapted for use by neighborhood associations, businesses, civic organizations, and other local networks.

Starting in January 2015, we will begin broad outreach for the community's first task – lowering household thermostats by at least 2°F. We will ask partner organizations to share information on the task, provide opportunities for those who have completed the task to share experiences and assist others, organize events, and so on. After proceeding through all 12 tasks, we will repeat the sequence in 2016 with additional partners and any innovations that emerge during the initial phase. For those interested in further reducing their energy use we will promote additional tasks from a household checklist (see Appendix II) developed by Hoosier Interfaith Power and Light.

In addition, we will seek partnerships with other key constituencies such as social service organizations, local township trustees and board members, Bloomington Economic Development Corporation, and the Bloomington and Ellettsville chambers of commerce.

As part of our effort to interface with renters, we will work with Indiana University's Residential Programs & Services (RPS) to help students learn how to be a responsible renter before they move off campus as well as what questions to ask landlords regarding the utility consumption and efficiency of potential rental units. Because nearly all IU students live in RPS housing during their first year, and because approximately 30,000 students live off campus at any given time, this partnership will be a key part of the rental outreach effort.

Goal #3: Set the stage for long-term energy efficiency through new or enhanced community policies.

The measures outlined in Goals #1 and #2 will be important in the immediate term, but we'll also need to facilitate long-term changes to have an ongoing impact on local energy use. A number of communities have experimented with energy-related policies that can help raise the bar for efficiency in residences over time, and we will explore these policies for local application during the course of the competition.

These policies could include:

- Mandating energy efficiency upgrades at point-of-sale.
- Developing energy benchmarking or disclosure requirements.
- Tightening requirements in the local building code.

Education K-12: Operations and Curriculum

Background

The Monroe County School Corporation (MCCSC), which accounts for 80% of the public school population in Monroe County, has a preexisting plan in place to reduce energy usage in its facilities and an Energy Education Specialist on staff to implement strategies. Between 2009 and 2013, MCCSC reduced system-wide electricity, gas, and water usage by 36% and saved \$5.6 million dollars for the school corporation. (Electrical usage accounts for approximately 75% of this total; gas usage is the most variable and weather-dependent portion.) These efforts are ongoing.



In 2012, two MCCSC schools and Project School – a charter school – participated in a grant-funded community energy challenge with Monroe County Government. The challenge led to the development of lesson plans for energy conservation in science and math classes. We will continue to build on these lesson plans for this challenge.

MCCSC has an established relationship with local utilities, including Duke Energy, providing funding and expertise for curricular development and energy reduction in programs for building operations. The Superintendent of MCCSC has also endorsed Monroe County Energy Challenge efforts (letter of support forthcoming; see Appendix III for all Letters of Support).

Harmony School, a private K-12 school, will offer students a course about renewable energy sources and energy alternatives to fossil fuels, as well as the physics of energy conversions and thermodynamics. This is a project-based course in which students will work with professionals to study and implement some energy solutions at Harmony. They will learn how to conduct an energy audit and research the feasibility of various solutions to save energy. Students will specialize in different types of renewable energy in order to inform the school about their chosen alternative.

The Richland-Bean Blossom Community School Corporation and Project School are both recent additions to the effort and will be providing detailed goals and strategies in the near future.

Goals

- Integrate school energy use with classroom curriculum to increase students' understanding of energy use.
- Reduce energy consumption by 5% per annum to reach a target of 40% overall reduction from the 2009 baseline.
- Use school-based networks, class projects, and other activities to foster energy reduction across the community.

Strategies

Goal #1: Integrate school energy use with classroom curriculum to increase students' understanding of energy use.

- Act as a liaison between the teaching and operations staff and with school administration.
 - Establish lines of communication between the schools' operations staff, who implement energy conservation measures, and the faculty. This collaboration will allow students, faculty, and staff to use the schools' ongoing operations as learning tools, thus establishing the schools as "energy labs."
- Periodically assess the status of energy education in the schools and promote increased participation. An initial survey in September 2014 yielded a high level of interest among faculty for involvement in developing and sharing lesson plans on energy use and conservation.
 - Work with public school administration and the principals of charter and private K-12 schools within Monroe County to identify an "energy champion" in each school and service or administrative building, coordinate their efforts, and recognize their achievements.
 - Involve students in creating and implementing energy conservation practices as well as events and promotions to induce student and teacher awareness to rise together.
 - Promote and publicize energy-related grants and contests in which teachers and students are engaged.
- Create an energy education curriculum that motivates students to take materials and knowledge home and inspires teachers to apply what they teach to the solution of real world problems.
- Collect, share and publicize curriculum resources for energy education. We will compile and share lesson plans for grades K-12 covering a variety of subjects.
 - Harvest teacher-developed lesson plans, exercises, classroom activities, grant applications, etc. related to energy use.
 - Index and store these materials in shared folders on Google Drive, making them available for future classrooms.
 - Use key faculty (Energy Champions) and a county-wide Student Conservation Council to develop new programs and share information.

Goal #2: Reduce energy consumption by 5% per annum to reach a target of 40% overall reduction from the 2009 baseline.

- Evaluate school buildings for energy efficiency.
- Install pulsed oscillators in schools to provide real-time visibility into how much electrical energy a building is using at defined intervals.

- Replace outdated inefficient equipment with energy-efficient equipment (e.g. variable frequency drives (VFD) in fans and chillers in school HVAC systems for humidity control, etc.)
- Create heating zones using staggered starts of power-drawing equipment.
- Develop a strategy for alternating the on/off cycle for heating/cooling in adjacent areas to maintain temperature set points while expending less energy.

Goal #3: Use school-based networks, class projects, and other activities to foster energy reduction across the community.

- Utilize engaged students as the conduit for outreach into their homes, in support of the goals of both the residential and K-12 program plans.
- Develop curriculum and suggested assignments that encourage students to use their classrooms and their own homes as energy labs.
 - Use plug-in power and energy meters (e.g. "Kill-A-Watt" Meter) and other tools to enable students to explore energy use.
 - Use the soon-to-be-installed [Pavegen](#) project at Bloomington South High School, where the energy of every footstep is captured and converted to electrical power. This project was funded by grants from Duke Energy and The Raymond Foundation, as a way to engage students in energy education.
- Form a Student Council to provide advice on ways to innovate and motivate others to adopt new energy conservation practices, both in school and at home. Modeling a new social norm will generate positive pressure and reinforcement for change.

K-12 Deliverables

We will suggest, produce and/or collaborate on lessons, programs and activities within the following categories:

- Tier 1 deliverables increase awareness of energy consumption and conservation but require little if any extra effort from the classroom teacher. They facilitate easily identified behavior modifications. They could include inter-school energy competitions, real-time energy usage displays in schools, energy tip sheets, and other materials.
- Tier 2 deliverables integrate energy-focused contents into the existing curriculum. By integrating with state standards and by sparing the research and development effort on the part of the individual teacher, they aim at easy and widespread adoption of the energy lessons. This could include providing access to "Kill-a-watt" meters and other tools to enable students to explore home energy use.

- Tier 3 deliverables extend the scope of energy education beyond what currently exists in the schools and/or extend it beyond the walls of the school into the community. It is anticipated that the teacher's own degree of enthusiasm and commitment and that of the students will drive participation in these initiatives.

Municipal

Monroe County Government



Background

The total population of Monroe County is 141,888 according to the U.S. Census (See Appendix IV). This includes the populations of all the municipalities listed below.

In 2006, the Monroe County Council passed a resolution in support of energy reduction, with a goal of 3% reduction per annum. Scrutiny of energy budgets includes electricity, natural gas, and fuel use. To achieve this goal, Monroe County Government (MCG) has taken a number of actions:

- In 2011, the Monroe County Environmental Quality and Sustainability Commission was established to serve as an advisory body to the Board of Commissioners. The Environmental Commission issues annual reports ([2012](#) and [2013](#)) highlighting energy savings.
- When the County Courthouse - a historic structure built in 1906 - was renovated in 2011, HVAC upgrades were implemented to reduce energy use.
- In 2012, MCG underwent a full [energy audit](#) through a grant from the Indiana Office of Energy Development. Immediately thereafter, MCG embarked on efforts to reduce energy consumption – including the retrofit of T12 overhead lighting to T8, the replacement of outdoor lighting with LED bulbs, the installation of occupancy sensors in offices and restrooms, and the addition of energy misers on vending machines.
- In 2012, the Monroe County Council created a non-reverting energy fund. The fund utilizes the Monroe County Environmental Quality and Sustainability Commission's annual report on energy savings. The Council can set that dollar amount aside into the energy conservation fund to be used on future energy conservation projects.
- Also in 2012, MCG received grant funding for the installation of solar panels on the roof of the county-owned portion of the historic Showers Building, where several of the county's offices are located. In tandem with this installation, the 2012 energy challenge was launched with two public schools and a charter school. It included an educational component for elementary-age children.
- MCG was awarded the [Association of Indiana County's Local Government Cooperation Award for Community Conservation in 2012](#). This facilitated the launch of an energy dashboard, which tracks energy use and solar panel production. The dashboard is available for the public to view on the MCG [website](#).

MCG is recognized as one of the “greenest” county governments in the Great Lakes region by the [*Midwest Energy News*](#). MCG continues to aggressively pursue programs to reduce energy use in county buildings and the installation of additional solar panels to produce energy.

Goals

- Reduce energy use by 10% in 2015 and 16% in 2016, throughout county operations.
- Establish county-wide green teams to promote energy savings and efficiency across the organization.

Strategies

Goal #1: Reduce energy use by 10% in 2015 and 16% in 2016, throughout county operations.

- Employ performance contracting to achieve energy reductions in priority facilities.
 - Honeywell is the general contractor tasked to institute energy efficiency measures throughout all county buildings, beginning in 2015. More than 50% of the cost for the Honeywell program has been set aside from the recently-approved 2015 General Obligation Bond. The remainder of the cost (a lease-finance arrangement) is scheduled to come before the County Council in December 2014. The cost savings are guaranteed by Honeywell. Proposed measures include:
 - Repair and replacement of aging HVAC infrastructure, including an analysis of ductwork and the creation of zones for electronic thermostats;
 - Completion of the lighting upgrade, including the installation of occupancy sensors in remaining areas; and
 - The development of a MCG building-wide energy dashboard, allowing residents and employees to discern energy use and production on a building-by-building basis.

In sum, a reduction of energy use (12% in electricity and 21% in natural gas) is guaranteed, once all upgrades have been completed. Honeywell has noted this will result in annual reduction in 680 tons in greenhouse gas emissions by the county.

Honeywell will also work with Solar Energy Solutions to establish a plan to install a solar panel array on the remaining roof space on the portion of the Showers building owned by MCG.

- Use the county’s bonding authority and other funding to make resources available for both efficiency upgrades and solar installations.

The 2014 General Obligation (GO) bond includes an appropriation for the installation of a solar panel array on the roof of the Charlotte T. Zietlow Justice Center. This is scheduled for installation in the first quarter of 2015. It is estimated that the array will produce more than 90,000 kwh per year. The Justice Center comprises 51% of county building energy use, mainly because it houses the County Jail. As a result, the focus of attention on energy reduction (and energy production) programming is on this building.

Goal #2: Establish county-wide green teams to promote energy savings and efficiency across the organization.

- Green teams will create a value statement that will define why being green is meaningful to the community and the citizenry.
- Green teams will be established in each MCG building. Each team will create a value statement and establish a plan to reduce energy use in their building. The Green Team members will meet to learn about the current energy use in their building and the plans already in place to improve energy efficiency throughout MCG buildings. In addition, a process will be established to create a communication pathway between the Green Team and MCG maintenance staff to respond to specific issues or concerns.
- Green teams will model positive behavior and encourage change within the community.



Town of Ellettsville

Background

The total population of Ellettsville is 6,400.

The primary municipal accounts in the Town of Ellettsville include the wastewater treatment plant, the police station, and the fire department. The Town Hall was vacated permanently after a flood that occurred in December of 2013. Town offices are currently housed in a temporary location, but the Town does not currently pay or have access to the utility bills at this location. A new structure is currently being planned for construction.

Goals

- Reduce energy consumption by a combined 15% at the Wastewater Treatment Plant and Utility Maintenance Building.
- Reduce energy consumption by a combined 10% at the Ellettsville Police Station, Fire Department, and Street Department.

Strategies

Goal #1: Reduce energy consumption by a combined 15% at the Wastewater Treatment Plant (WWTP) and Utility Maintenance Building.

- Work with an energy consulting firm to perform a lighting audit at the WWTP to determine most cost-effective plan to replace lighting fixtures with more efficient technologies, install timing devices, and identify over-lit spaces that can be de-lamped.
- Optimize WWTP operations by reviewing current operational procedures and implementing energy efficient standard operating procedures.
- Possible equipment upgrades at the WWTP include:
 - replacement of paddlewheel aerators at WWTP with fine bubble aerators;
 - contactor installation on blowers; and
 - installation of variable speed drives on pumps.
- Continue use of specially trained contractors to carry out leak detection programs, thus reducing the energy requirements associated with pumping and treating water.
- Continue efforts to reduce infiltration and inflow in our wastewater collection system in order to achieve a more stable volume of influent into the WWTP, thus reducing both energy use and peak demands at the plant.

Goal #2: Reduce energy consumption by a combined 10% at the Ellettsville Police Station, Fire Department, and Street department.

- Insulation upgrades and lighting retrofits in the maintenance buildings at both the Utilities Department and Street Department will be undertaken. Further audits of the buildings will be carried out to determine other possible energy savings opportunities.
- Employee education and individual involvement will be encouraged.
- Police and Fire Department Buildings will undergo a lighting audit to optimize lighting fixtures and controls.



Town of Stinesville

Background

The total population of Stinesville is 195.

The Town of Stinesville is located five miles north-east of the Town of Ellettsville. The town is less than 1/2 square mile in size and is home to 195 residents and a handful of small businesses. Monroe County was recently awarded a Federal grant to rebuild the main bridge into Stinesville, which includes new LED streetlights. The

Town Council hopes to continue this trend and work with Duke Energy to upgrade streetlights in Stinesville with LED bulbs. Stinesville has just one government building, a historic church that has been converted into the town hall.

There are no current, locally based efforts to address residential energy use, and the Town hopes to use the MCEC as an opportunity to make progress in this sector.

Goals

- Reduce general energy consumption of community buildings by 3%.

Strategies

Goal#1: Reduce general energy consumption of community buildings by 3%.

- Utilize utility and professional services (such as lighting audits) to reduce energy use.

City of Bloomington

Background

The total population of Bloomington is 82,575 (See Appendix V).

Since 2010, the City has achieved a reduction in energy consumption of four percent through investments in energy efficient lighting, HVAC, and other measures. City Hall, housed in the historic Showers Building, has reduced energy use by almost half since 2006 through LED and HVAC upgrades, and lighting upgrades have also been installed in one parking garage, the Twin Lakes Recreation Center, and the Frank Southern Ice Arena.

Because City of Bloomington Utilities accounts for roughly 50% of all municipal energy use and about three-quarters of electricity use in City operations, we have pulled this department out separately and developed goals specific to this sector.



Goals

- Reduce energy consumption across city, non-utility operations by 15% by the end of 2016 using a 2013-2014 baseline.
- Engage City staff and constituents to join energy reduction efforts in both municipal facilities and at home.

Strategies

Goal #1: Reduce energy consumption across City, non-water-utility operations by 15% by the end of 2016 using a 2013-2014 baseline.

- Employ performance contracting and other strategies to implement upgrades in city facilities.
- Adopt clear standard operating procedures for all energy consuming city operations and an organization-wide energy policy.

Goal #2: Engage City staff and constituents to join energy reduction efforts in both municipal facilities and at home.

- Expand the City's Team Green to include additional departments.
- Launch an internal small-grant program to empower staff to make improvements they identify in their own facilities.
- Implement small-scale improvements that facilitate staff support of energy goals, such as programmable thermostats and motion sensors.
- Employ competitions among departments and facilities or with other units of government to encourage energy use reduction.

City of Bloomington Utilities: Water, Wastewater and Stormwater

Background

City of Bloomington Utilities (CBU) began its energy management program in 2009 when the utility took part in an energy management pilot program that was organized through a partnership between the Indiana Department of Environmental Management and EPA Region 5. This program was based on the *Energy Management Guidebook for Water and Wastewater Utilities*, a 2008 EPA publication.

While CBU experienced modest energy and cost savings as a result of the program, the largest benefit CBU received as a result of its participation was an expanded understanding of its own operations and a better ability to identify and follow through with energy conservation opportunities. In the past two years (Oct. 2012 – Oct. 2014), CBU saved more than \$125,000 as a result of its energy conservation program and, in 2013, CBU hired its first full-time staff person dedicated solely to energy and water conservation efforts.

Goals

- Reduce energy use and average monthly peak demand by 10% from a 2013 baseline by the end of 2016, normalized for pumping and treatment rates.

- Pursue on-site energy generation options at water and wastewater facilities.
- Reduce both supply-side non-revenue water and demand-side water consumption, thus reducing the energy required to treat and pump water and wastewater.

Strategies

Goal #1: Reduce energy use by 10% from a 2013 baseline by the end of 2016, normalized for pumping and treatment rates.

- Use performance contracting and other creative funding processes to reduce energy consumption at CBU facilities. Possible improvements that can be made through these funding opportunities include:
 - replacing outdated, inefficient equipment with energy efficient equipment (e.g. variable frequency drives on pumps and blowers and fine bubble diffusers in all aeration basins at wastewater treatment plants);
 - upgrade supervisory control and data acquisition (SCADA) systems at water and wastewater facilities to allow for more efficient operations;
 - update customer water meters to an advanced metering infrastructure (AMI), allowing the utility to reduce non-revenue water; AND
 - implement a proactive leak detection and repair program, which would reduce lost revenue and wasted energy pumping and treating water.
- Work with plant superintendents, operators, directors, engineers, and other CBU staff to develop standard operating procedures (SOPs) for all energy consuming operations. SOPs will detail how to operate equipment in a manner that will reduce operating costs (energy costs, maintenance costs, and equipment replacement costs), while still producing high quality end-products.
- Hold monthly Energy Management Group meetings with CBU directors, engineers, plant superintendents, plant maintenance staff, operators, and conservation managers to review energy bills, identify trends in energy use and abnormal energy use events, create solutions to reduce future energy use and peak demands, and cultivate an energy-conscious mindset among all CBU employees.

Goal #2: Pursue on-site energy generation options at water and wastewater facilities.

- Partner with IU, Ivy Tech, and other local college students to model on-site energy generation methods and carry out life cycle assessments for energy efficiency upgrades.

Goal #3: Reduce both supply-side non-revenue and demand-side water consumption, thus reducing the energy required to treat and pump water and wastewater.

- Implement the CBU Water Conservation Plan adopted by the Utilities Service Board in 2014 in order to reduce supply-side non-revenue water and demand-side water consumption. Implementation measures from the 2014 CBU Water Conservation Plan include, but are not limited to:
 - Carrying out yearly water audits to use as a foundation for CBU's leak detection program;
 - Providing rebates for water efficient appliances to CBU customers;
 - Providing CBU customers better access to detailed water use information;

- Developing a multifaceted public education campaign; and
- Analyzing the possibility of adopting conservation pricing.
- Conduct research in partnership with IU faculty to determine the most effective methods CBU can employ to encourage water conservation among CBU customers.

Community Engagement

In order to reach as broad a segment of the local population as possible, the Monroe County Energy Challenge will take an everything-but-the-kitchen-sink approach to community engagement. We will focus on visibility, inclusion, repetition, and simplicity to convey our central messages. We will utilize numerous delivery options to reach our diverse community. The community responds well to national competitions and we believe they will as well with the Energy Challenge.

Community engagement efforts will be spearheaded by the Engagement Committee of the MCEC (see Figure 1 below).

Multi-Media Strategy

The MCEC will rely on multiple forms of communication, including but not limited to:

- Earned media;
- Social media;
- Educational videos and “dos and don’ts” photos aimed at tenants and homeowners. These will be available via community access television (CATs), at City and County websites, and on Youtube and for general (free) distribution;
- Print advertising;
- Organizational listserves and newsletters;
- An MCEC website with links to related websites;
- Radio and TV interviews;
- Monthly outreach in multiple venues highlighting *Task of the Month* tasks; and
- Other outreach.

K-12 Strategy

The Education Committee will mobilize both students and staff in local schools to help reiterate and broaden lessons from the classroom. Possible avenues for involvement include the following.

- Establish a regular publication schedule with the local newspaper for student- and staff-generated articles on the GUEP competition and energy matters in general.
- Engage students in generating communications, internal marketing materials, and social media campaigns.
- Encourage and support students at the three MCCSC secondary schools to produce school media presentations for weekly, in-school viewing by the student body. An additional three MCCSC schools have broadcast capability that they use for daily announcements and other video news programs. A student leader involved with that

effort suggests making “infomercials” for energy reduction as a way to reach a broad audience in the schools. These infomercials will later be accessible from the shared Google Drive.

- Student leaders and building energy champions (discussed in the K-12 section) will work together to produce and update MCEC-related content for each school’s website and a Facebook page/Twitter feed.
- Students and teachers will be asked to engage with school operations staff to experiment with fine-tuning environmental controls in school buildings to explore methods of saving energy and increasing comfort levels.

Higher Education Strategy

Monroe County is home to two major institutions of higher education – Indiana University and Ivy Tech Community College.

While Indiana University’s meters will not be part of 2015-2016 phase of the Monroe County Energy Challenge, access to its more than 40,000 students - roughly 50% of Bloomington’s population and nearly 1/3 of the county’s population – and 7,400 staff and faculty will be critical to local efforts. In particular, the MCEC will explore a partnership with Residential Programs & Services, a campus division that operates the on-campus residence halls and apartments that house nearly all IU students at some point in their matriculation. As students seek their first apartments and prepare to move off-campus, simple, targeted messaging will help them consider the broader costs of living (including energy and transportation, among others) that are often ignored in housing decisions. The IU Office of Sustainability, represented on our Residential Committee, will also be a key partner.

Likewise, Ivy Tech’s 6,500 students and 200 staff members will be an important audience for the challenge. In addition to being homeowners or renters in the community (Ivy Tech does not offer on-campus housing), Ivy Tech students are developing a number of skills with direct relevance to the competition, including video production, web design, and HVAC and building operations skills. The MCEC will partner with Ivy Tech staff members to get messages out to students and to create opportunities for students to build their resumes.

Civic Organization Mobilization

Civic organizations provide access to existing social networks that will be needed to engage members of the population that are otherwise likely to remain uninvolved in the effort. Earth Care, one of the partners of the MCEC effort, has developed a compendium of materials to support congregation-based efficiency efforts through their *Task of the Month* program. These materials and their associated support activities will be adapted for dissemination through other types of organizations, including:

- Neighborhood associations;
- Clubs;
- Service organizations;
- Additional congregations not already involved in Earth Care; and
- Others as identified during the competition.

While all organizations will be encouraged to participate in the *Task of the Month* program, those that are interested in a lower level of participation can also support the effort by disseminating information to their members about critical actions such as insulating attics, providing volunteers for events, etc.

Business engagement

Businesses will be an important part of the project in several ways.

First, involvement of business owners and managers in the initial implementation phase will help them prepare for energy improvements in their own facilities and homes as we expand the reach of the energy plan over time. The commercial sector is a priority for the next phase of the effort, following the end of the Georgetown University Energy Prize competition.

Second, businesses can serve as a conduit to both staff and clients, similar to the role of civic organizations outlined above.

Third, they can serve as a source of both resources and expertise. This could include:

- Sponsorship of the contest overall through grants (through associated foundations, for example);
- Sponsorship of school green teams through funding, equipment, or training (on how to do energy audits, for example);
- Collaboration with students in creating community engagement materials, such as how-to videos;
- Supporting efforts to showcase materials needed for *Task of the Month* tasks (at local hardware stores, the public library, etc.); and
- Encouraging and providing support for their employees to participate in service days that support the challenge effort.

Competitions, drawings, and events

To keep the MCEC fresh and interesting, we will engage the public through energy-focused events and competitions. This will include:

- Drawings for free energy audits, energy efficient products, or cash prizes to help offset energy efficiency investments;
- Student-led outreach events;
- The continued expansion of “Beat the Meter Blitz,” which provides free energy audits to residents via lottery;
- Work with neighborhood associations and other partners to deploy an EnergyMobile, to implement energy efficiency improvements in targeted neighborhoods;
- Tabling at popular events like the Farmers Market to recruit additional participants;
- Neighborhood or government building energy savings contests; and
- Events such as *Caulk of the Town*, efficiency “barn raisings,” etc.

Utility Data Reporting

The Data Committee, comprised of several members of the Monroe County Environmental Quality and Sustainability Committee and a representative from each gas and electric utility company in the region, will be responsible for coordinating the reporting of data to the GUEP program. This team has been working to insure that residential reporting can be confined to the geographic boundary of Monroe County and that the municipal meters can be properly enumerated for reporting.

Four primary companies provide gas and electric utility service in Monroe County. Natural gas service is provided by Vectren Corporation. Electric service is split between three major utilities, Duke Energy, South Central Indiana REMC (SCI), and Utility District of Western Indiana REMC (UDWI). A second natural gas supplier with fewer than 100 customers and a fourth electric utility with fewer than 20 customers in Monroe County are not included in reporting because of their minimal impact on local energy use.

Residential

All of our utility partners have identified a rate code by which the residential sector can be aggregated. This code will include traditional single-family owner occupied homes, as well as any rental units that are sub-metered that require residents to pay their own energy bills. Typically, tenants who receive a bill from the utility company are billed on the same residential rate as noted above.

This code will not include multi-family housing units that are billed on a commercial rate. Tenants in these types of complexes do not ever see their electric or gas bills and we know from experience that neither the property owners nor the utilities are forthcoming with account or usage information.

The City of Bloomington's RentRocket project (described by reference on page 6) involves 11 apartment complexes, none of whom have successfully gathered complete utility data for local rental properties. The effort to collect energy usage information from these rental units continues through outreach to tenants, but reporting this data to GUEP will not be possible because it is incomplete and because we do not receive the data directly from the utility company.

Municipal

All meters paid directly by the town, city, or county will be reported as part of the competition. This includes all streetlights, stoplights, utility pumps and lift stations, treatment works, as well as county-, school-, and town-occupied buildings.

See Appendices VI – IX for detailed lists of account numbers by utility company and taxing entity. Account numbers from Stinesville and the MCCSC will be available soon.

More detail on several accounts requiring special attention is included below.

Special Cases

Bloomington Transit facilities:

- Grimes Bus Garage/Offices – The Grimes St bus garage and office facility is shared by Bloomington Transit (a municipal entity) and Campus Bus (a University entity). These electric and gas bills are split 50:50 by the two entities, thus only half of this bill should be considered municipal.
- Bloomington Transit Center – The Transit Center serves both Bloomington Transit and the Bloomington Police Department. The electric bills for this building (there is no natural gas service) should be considered part of the competition.

Township Offices – As indicated earlier, township facilities will not be included in the competition. Townships serve primarily as social service organizations in Indiana, and do not control independent municipal jurisdictions.

School Corporations – The two public school corporations in Monroe County will participate in the competition. Monroe County Community School Corporation and Richland-Bean Blossom School Corporation have signed on for both account reporting and student outreach and education efforts. Two private schools – Harmony and The Project School – have agreed to join the Challenge. The Education Committee has made contact with all other schools in the county and expects others may sign on as well.

Independent organizations that occupy city- or county-owned buildings but that pay their own utility bills (without city or county funds) will not be included in the competition.

Program Management and Partners

The Monroe County Energy Challenge will be guided by a Steering Committee – including committee leadership and representatives from all participating utilities. This committee will provide general guidance and feedback on the effort, plus a direct connection to the data needed for the competition and information on utility programs or regulatory changes.

The Leadership Team includes one representative from the City of Bloomington government, Monroe County government, and the chair of the Task Force and meets on a regular basis in order to discuss issues as they arise and ensure that the effort stays on track. Ellettsville and Stinesville will be invited to include a representative on this committee now that they have joined the competition.

The Task Force, which is the same as the Steering Committee minus the utility representatives, focuses on community-side implementation of Steering Committee recommendations and general competition logistics.

Finally, the MCEC has been split into five focused committees. There are three committees responsible for developing energy efficiency awareness and programs in a specific sector – the

Residential, Municipal, and Education (K-12 schools) Committees. The Data Committee supports all of the other committees, and is responsible for utility energy usage data collection and analysis, awareness surveying, and the MCEC website. The recently-formed Engagement Committee will coordinate outreach to the entire community to create energy efficiency awareness and encourage participation in the MCEC.

All committee members serve as volunteers, deeply committed to the energy project. This group will serve as the “face” of the project, doing something for the community to inspire and spark engagement.

See Figure 1 for a representation of the MCEC organizational structure.



Figure 1. Organizational Structure of the Monroe County Energy Challenge

Special Considerations

Innovation

Financing availability is consistently listed as the largest barrier standing in the way of pursuing more energy efficient facilities and, even with funds available, organizations must have adequate staff with sufficient skill-sets to organize and manage these projects. Innovative financing practices can go a long way to alleviate these concerns. MCEC will pursue several financing options to ensure all community entities have access to energy efficiency opportunities.

Innovative financing options to be pursued include performance contracting, which will allow our municipalities to have access to funding opportunities that will result in long-term savings, while having minimal impact on annual budgets. Additionally, the performance contractor will provide the necessary expertise to identify and quantify energy savings opportunities. MCEC will also encourage the establishment of an energy efficiency revolving loan fund to provide a self-sustaining pool of money available to a broad array of community entities. On-bill financing and other "pay-as-you-save" financing options will be explored in partnership with regional electric and gas utilities. This will be a vital tool in spurring energy efficient investment in area rental properties.

MCEC and its governmental and school partners will seek grants and donations to support its efforts from its utility partners, local businesses, the Indiana Office of Energy Development, and various foundations. MCEC will affiliate with the Community Foundation of Bloomington and Monroe County Indiana to establish an account for receiving tax-deductible grants and donations from various sources. A preliminary budget has been prepared and shared with our partners (See Appendix X).

Due to Monroe County's high rate of rental properties, MCEC will develop two new innovative measures to reach this population. The Green Landlord Certification and Green Lease Program will allow future tenants to easily include energy efficiency in their rental choices. Additionally, developing a creative partnership with Indiana University's (IU) Residential Program Services (despite IU's meters not being part of the competition) will provide an avenue to reach out to many of the community's residents.

In addition, RentRocket will be an interactive website, associated smart phone app, or other combination that will enable participating, sustainability-minded renters find tools that can help them locate and promote green rental housing in the area.

Finally, MCEC believes that the best approach to mobilizing residents in our community to reduce energy usage is the simple, step-wise approach. The *Task of the Month* is a simple, step-wise approach to which residents can commit.

Potential for Replication and Scalability

There is nothing inherently different about Monroe County and the entities within that would prevent our Energy Plan from being implemented in communities across the nation. However, we realize that each community is unique and that each community will have already achieved varying amounts of success through previous efforts. With this in mind, MCEC will document both future and past energy efficient efforts to ensure that other communities—no matter what stage of energy efficiency they currently enjoy—will be able to duplicate our success, and avoid our failures. MCEC will continually update our plan, detailing our efforts.

The K-12 lesson plans and projects that will be captured in our Education Committee shared Google Drive in order to be easily accessed and replicated by other communities. Also, the MCEC website will be the central source for the residential energy efficiency programs that MCEC will implement during the Energy Challenge. The local community college, Ivy Tech, will help MCEC establish and maintain the website. To the extent permissible, the website's design and coding could be made available to other communities as a starting point for energy reduction efforts.

MCEC's energy savings plan heavily depends on the development of strong relationships between municipalities, businesses, universities, school systems, and other organizations within the community. These relationships are the building blocks that any community can—and must—create in order to implement an effective energy conservation plan. Because our plan focuses on the mutual benefits we can achieve as a community, and not relying on any one entity to carry full responsibility, this plan is intrinsically replicable and scalable.

MCEC has reached out to the Indiana Office of Energy Development, the statewide office concerned with energy matters, including energy efficiency. We propose to work with them to spread the Energy Challenge concepts and approaches to other communities in Indiana, especially those college towns very similar to Monroe County, Indiana – for example, Purdue University in West Lafayette/Tippecanoe County, University of Notre Dame in South Bend/ St. Joseph County, Indiana State University in Terre Haute/Vigo County, and Ball State University in Muncie /Delaware County.

Likely Future Performance

MCEC understands that long-term energy savings do not result from temporary efforts and that our participation in the GUEP will not be a success if it does not result in permanent local policy and program changes. The City of Bloomington displayed a willingness to implement far-reaching ordinances when, in 2009, the City approved the Green Building Ordinance, which, among other requirements, states that all new construction of municipal buildings must meet LEED standards, and that all existing municipal buildings must undergo a LEED feasibility assessment. While carrying out this plan, MCEC will work to develop additional long-term local policies, such as mandating energy-efficiency upgrades at point-of-sale, exploring energy disclosure requirements, and stricter local building codes. Long-term success will also be

nurtured through non-mandatory programs that local residents will benefit from, including Green Lease, Green Landlord, and EnergyMobile programs.

Long-term performance also heavily depends on the capacity to reach all segments of the community. MCEC's goal of contacting at least 80% of Monroe County's households will be a crucial step in this process. In addition, school-aged children are a key resource to get information into local households. They also compose the county's (and the world's) future population; educating them early on the importance and benefits of energy efficiency will ensure MCEC's efforts extend into the future.

One way to institutionalize these changes is for local municipalities to commit resources to staffing. With this in mind, the City of Bloomington has already created two full-time positions dedicated to sustainability and resource conservation, and MCCSC has one full-time staff person pursuing energy and cost saving projects. These permanent positions will continue to act as champions for the community into the future, ensuring that any savings are not short term.

The initial phase of the Energy Plan outlined here focuses on very specific aspects of energy: metered electricity and natural gas in the residential, municipal, and K-12 sectors. In order to reduce the community's environmental footprint into the future, we'll need to broaden our focus.

Areas for consideration, following the initial 2015-2016 implementation period, include but are not limited to:

- Commercial sector metered energy use;
- Institutional metered energy use;
- Distributed or neighborhood energy systems;
- Transportation;
- State-wide utility policies;
- Utility rate structures and policies, including the use of inclining block rates, peak charges, smart meters that allow users to control time of use, and other strategies; and
- Other topics identified during this initial phase.

Prize Purse

The Prize Purse will be housed at the Monroe County Community Foundation and used for the following purposes.

- A portion of the purse will be set aside as an **energy endowment**, with annual interest payout being used to fund related programs throughout the community. In addition, the endowment could accept donations from community members to help grow the yearly payout over time.
- An additional portion will be used to create an **energy efficiency revolving loan fund**. These funds will be used to give loans to local government, businesses, non-profits, and other entities. Loans would then be paid back through energy savings to maintain a continuous source of funding for local projects. This fund could likewise accept donations from the general public.

- Finally, we will create an **energy efficiency grant program** that can be used either in conjunction with loans through the revolving loan fund (to make projects more accessible to organizations with limited capital) or as stand-alone grants.

In all three programs, we will emphasize inclusion, visibility, payback, and environmental impact. While the programs will not be used to fund residential programs directly, other organizations may be recruited as partners to develop “pay-as-you-save” and other programs that encourage individual homeowners to make improvements in their own homes. Creative school program development and implementation will also be eligible for grant funds.

Evaluating Success

The quantitative success of the MCEC will be evident in reduced utility usage. The qualitative success of the MCEC will be evident in increased awareness. Our goal is to create a community conversation – connecting people through conversations at home, in the media, in school, through utility bill inserts, on our website, and at public events. Public awareness of the effort is key, and providing doable small steps to the public will help us achieve our goals.

We will achieve success by reaching 80% of Monroe County households through the following:

Media and Social Media metrics:

- Number of mentions in the local *Herald-Times* newspaper, published letters to the editor and published guest columns focusing on our efforts;
- Increased views of the county and city energy dashboards;
- On-air PSAs announced on community radio station WFHB and public radio station WFIU; and
- Uptick in conversations on social media – with a website, Twitter, and Facebook presence; uptick in blog postings for efficiency tips and other energy-related comments; number of people registering for media feeds from MCEC.

Education metrics:

- Number of teachers using energy-based curriculum in classes.
- Lessons will include some homework projects, tracking energy use in students’ homes, and conversations over the dinner table between students and parents about energy use.

Utility Bills metrics:

- Duke and Vectren will include utility bill inserts to encourage residents to join the energy efficiency effort.

Community Event metrics:

- Given the high level of participation in community activities, MCEC will host community events with professional partners to provide hands-on demonstrations of energy efficiency measures for homeowners and renters;

- MCEC will partner with a number of Neighborhood Associations to host the EnergyMobile to assist residents with their energy efficiency needs; and
- MCEC will organize an energy efficiency fair to take place during the Summer Farmers' Market in downtown Bloomington.
- MCEC will coordinate an effort with local hardware and home improvement stores to provide retail displays of energy efficiency materials for consumers.

Other metrics:

- Township government offices, which supply local “poor relief,” will be a distribution point for energy efficiency information, resulting in a positive influence on those who are impacted by energy bills.

Finally, the Leadership Team will be responsible for measuring and demonstrating impact and producing data for analysis. Metrics include:

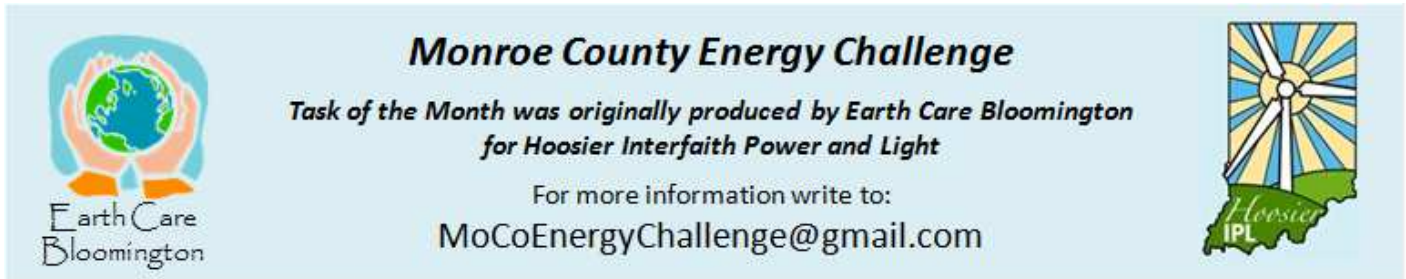
- Surveys of energy efficiency knowledge will reflect an increase of understanding of importance of energy efficiency and demonstrate the impact of participation in the program;
- A number of rental units will have signed commitments for participation in Challenge, including coverage of RentRocket website and green leases;
- Reduction in energy usage for municipalities, schools and residences, over time, will be measured using utility data. Quite simply, this is energy saved versus the original baseline for each entity. Metrics will include the numbers of participants as a percentage of the school, governmental entity, and residences; the qualifying event will be identified as Tier 1, Tier 2, or Tiers 3 (SEE Deliverables section above as examples) and weighted accordingly.

As community partners come on board, the MCEC will be able to further expand our benchmarks for success.

Appendices

- I. Task of the Month Program
- II. Household Checklist
- III. Letters of Support
 - Mike Wilcox, Superintendent of Richland Bean Blossom Community School Corporation
 - Indiana Senator Mark Stoops
 - Monroe County Commissioners
 - Mayor, City of Bloomington
 - City of Bloomington, Commission on Sustainability
 - Indiana University, Office of Sustainability
 - Old National Bank
 - Duke Energy
 - South Central Indiana REMC
 - Utilities District of Western Indiana REMC
 - Vectren Corporation
 - Southern Indiana Renewable Energy Network
 - Earth Care
- IV. Monroe County Demographic Information
- V. City of Bloomington Demographic Information
- VI. Monroe County Utility Accounts
- VII. City of Bloomington Utility Accounts
- VIII. RBBCSC Utility Accounts
- IX. Town of Ellettsville Utility Accounts (lift and booster stations pending)
- X. Preliminary program budget

Appendix I Task of the Month Program



TASK OF THE MONTH PROGRAM

Getting Started

Here are some suggestions for advance planning, establishing a weekly presence, helping people get the tasks done and maintaining momentum throughout the year.

Assemble a team.

Include youth, educators, writers, building professionals and anyone else willing to help.

Make the program visible

- Post information on your website.
- Include articles in your newsletters or in emails to your distribution list.

Provide Incentives for participation

- Invite people to make a New Year's Resolution that they will participate in the program.
- As people sign up, put their names in a hat for a drawing to take place at the end of the month.
- Offer assistance to the winner or, as funds allow, something to help complete one of the following months' tasks.

Help people get the tasks done:

The Monroe County Energy Challenge task force will offer information sessions, presentations by experts and will negotiate bulk discounts for larger tasks.

Involve youth. Is there a way that young people in your community could take on a role? Perhaps they can be trained to do certain things (i.e. insulating water heaters) or provide assistance with simple tasks (like helping the elderly change light bulbs in ceiling fixtures). However, be sure young people are adequately trained and supervised for whatever job you ask them to do!

Bulk purchases. The Monroe County Energy Challenge Residential Programs Committee will work to negotiate discounts on bulk purchases of services or materials needed to complete many of the tasks.

Celebrate achievements! We will celebrate our community's accomplishments.

Maintain momentum throughout the year:

- Announce each new task in emails, newsletters, website, etc.
- Set up a display if applicable;
- Occasionally have a drawing for an item helpful in accomplishing the task, or related to it; have a grand prize at the end of the year, and put a name in for every task completed;
- Report results within your group and to mocoenergychallenge@gmail.com in an email with the Subject ToM.

Appendix II Household Checklist

Share these tasks with your neighbors, colleagues or civic group.

INTRODUCTION

We know that caring for the earth, in part, means that we must use less energy in our homes. Yet for many, the sheer quantity of actions to take is overwhelming. The Task of the Month Program focuses on one action area at a time and encourages residents to accomplish that one task, creating a sense of community and ensuring that the most important steps will be taken.

Overview: The program is very simple:

One task each month. With this program, the whole community focuses on completing one specific task per month.

Information is included. For each task, there is a flyer explaining how to do it and suggesting websites and other resources for more information.

<u>Month</u>	<u>Suggested Monthly Tasks</u>	<u>Annual Savings*</u>
January	Lower thermostat in winter by at least 2 degrees.	\$20
February	Install and use a programmable thermostat.	\$60
March	Seal large air leaks.	\$80
April	Seal and add insulation in attic.	\$200
May	Wash clothes in cold water; air dry clothes.	\$60
June	Increase AC thermostat by at least 3° F, or to at least 78° F.	\$20
July	Insulate water heater & lower water heater temperature to 120° F.	\$15
August	Replace 6 interior and 1 exterior incandescent bulbs.	\$40
September	Have your furnace serviced.	\$60
October	Weatherize windows & doors.	\$30
November	Cut phantom energy loads by half or more.	\$25
December	Install low-flow showerheads and faucet aerators.	\$25

** These tasks were selected from energy-saving actions recommended by the Rocky Mountain Institute and ENERGY STAR, based on their effectiveness (cost, effort and expertise required, and potential for significant energy savings). Please note that the savings listed for each task are estimates based on national averages; individual household results will vary.*

Appendix III Letters of Support



Richland-Bean Blossom

Community School Corporation

600 South Edgewood Drive, Ellettsville, Indiana 47429

• Phone: (812) 876-7100 • Fax: (812) 876-7020 • Web: www.rhbcs.k12.in.us

SUPERINTENDENT

Dr. Mike Wilcox
mwilcox@rbbsc.k12.in.us

ASSISTANT

SUPERINTENDENT
Mr. Jason Blotzinger
jblotzinger@rbbsc.k12.in.us

SCHOOL BOARD

Mr. Jimmie D. Darnell
Mr. Dana Robert Kerr
Mr. Larry Thrasher
Ms. Debra Walcott
Mr. Randall C. Wright

VISION

Living, learning and leading
together to achieve 9C, 9C, 9C.

MISSION

Our mission is to work in
cooperation with the
community and families to
provide students with an
education that promotes
responsible citizenship,
develops critical thinking,
communication, collaboration
and creativity.

October 30, 2014

Dear Friends,

It is with great pleasure to give the support of the Richland-Bean Blossom Community School Corporation to the Monroe County Community for the Georgetown University Energy Prize Performance. I have attached a list of our energy providers.

Sincerely,

Dr. Mike Wilcox
Superintendent of Schools

"Where Students Come First"

Senator Mark Stoops
200 West Washington Street
Indianapolis, Indiana 46204
(317) 232-9847
s40@ind.gov

Committees:
Environmental Affairs, RMM
Corrections & Criminal Law
Financial Institutions
Health & Provider Services
Insurance
Local Government

20 June 2014

To whom it may concern,

As Indiana State Senator for District 40, which includes all of Monroe County, I am pleased to support the City of Bloomington and Monroe County, Indiana's application for the Georgetown University Energy Prize (GUEP). I believe that the future of energy is in finding and using renewable sources of energy, and that this not only helps preserve our fragile environment, but can be a keystone of Indiana's economic future.

I will support this initiative by continuing to pursue legislation relating to energy efficiency programs and recycling and working closely with state agencies and local communities like the City of Bloomington and Monroe County.

I pledge my full support to the City of Bloomington and Monroe County's pursuit of the Georgetown University Energy Prize. I will support our local GUEP team's efforts to develop innovative programs, policies, and solutions that will result in significant and sustainable reductions in local energy usage. I am excited to join in this important effort, and look forward to helping make Bloomington and Monroe County model communities for energy efficiency.

Sincerely,



Mark Stoops
Indiana State Senator
District 40
S40@in.gov



OFFICE OF
MONROE COUNTY COMMISSIONERS

100 West Kirkwood Avenue
The Courthouse Room 322
BLOOMINGTON, INDIANA 47404

Telephone 812-349-2550
Facsimile 812-349-7320

Patrick Stoffers, President

Iris F. Kiesling, Vice President

Julia L. Thomas, Member

TO: Georgetown University Energy Prize
FROM: Monroe County Board of Commissioners
DATE: June 16, 2014
RE: Support for the Monroe County/City of Bloomington GUEP application

Julie Thomas, through this letter of commitment, express my support of **Monroe County's** effort to compete in the Georgetown University Energy Prize ("GUEP"). I will, to the extent possible, support other municipal officials and staff, work with stakeholders, speak to the public and the press, and otherwise engage our residents in energy savings efforts.

I understand that, if our community receives a monetary award from the GUEP, **Monroe County Community Foundation** will be the recipient of the funds and will be required to use those funds to the benefit of the whole community, as described in the Competition Guidelines.

Signed _____

Julie Thomas
Name of Official

Monroe County Government
Organization

100 West Kirkwood Ave., RM 323
Street Address

Bloomington, IN 47404
City, State, Zip

17 June 2014
Date

Monroe County Commissioner
Title



**MARK KRUZAN
MAYOR**

CITY OF BLOOMINGTON

401 N. Morton St Suite 130
PO Box 100
Bloomington IN 47402

**DEPARTMENT OF ECONOMIC
& SUSTAINABLE DEVELOPMENT**

p 812.349.3418
f 812.349.3520

TO: Georgetown University Energy Prize
FROM: Mark Kruzan, Mayor
DATE: June 18, 2014
RE: Support for the Monroe County/City of Bloomington GUEP application

Through this letter of commitment I express my support of the joint Monroe County/City of Bloomington effort to compete in the Georgetown University Energy Prize ("GUEP").

I will, to the extent possible, support other municipal officials and staff, work with stakeholders, speak to the public and the press, and otherwise engage our residents in energy saving efforts.

I understand that, if our community receives a monetary award from the GUEP, the Monroe County Community Foundation will be the recipient of the funds and will be required to use those funds to the benefit of the whole community, as described in the Competition Guidelines.

Signed

Mark Kruzan
Name of Official

City of Bloomington
Organization

401 N. Morton Street
Street Address

Bloomington, IN 47404
City, State, Zip Code

Date

Mayor
Title



City of Bloomington Commission on Sustainability
Letter of Support for the Georgetown University Energy Prize

The Bloomington Commission on Sustainability strongly supports Monroe County, Indiana's effort to compete in the Georgetown University Energy Prize ("GUEP").

The Bloomington Commission on Sustainability (BCOS) is a volunteer-powered commission staffed by the City of Bloomington Department of Economic and Sustainable Development. BCOS promotes economic development, environmental health, and social equity in our community for present and future generations. The commission gathers and disseminates information; promotes practical initiatives; and measures, monitors, and reports on our community's progress toward sustainability. Members represent many aspects of the community, active in local businesses and non-profits. Many are connected to the Indiana University School of Public and Environmental Affairs (SPEA). Ex-officio members represent the County Commissioners, City Council and the Office of Sustainability.

The Commission is currently working to document where the community currently stands on goals outlined in STAR Communities Rating System. The rating system is designed to foster innovation, cultivate collaboration and inspire leadership. The Climate & Energy objectives and actions are designed to "[reduce climate impacts through adaptation and mitigation efforts and increase resource efficiency]" complement the goals of GUEP. Specifically, the Greenhouse Gas Mitigation objective is to achieve 50% reduction by 2020. The action types include education and outreach, program and policy development, planning (through zoning and codes) and use of incentives. These are closely aligned with the goals of the Georgetown University Energy Prize. BCOS will play an important role in communicating, educating and encouraging residents to reduce their reliance on fossil fuels as well as in documenting the community's progress.

Sincerely,

BCOS Commission Co-Chairs:

Molly S. O'Donnell

Jeffrey Lowe



INDIANA UNIVERSITY

The Indiana University Office of Sustainability is pleased to support the City of Bloomington and Monroe County, Indiana's application for the Georgetown University Energy Prize. The IU Office of Sustainability is a unique entity charged with catalyzing and coordinating sustainability initiatives across academic, research, operations and community realms for students, faculty, staff, and alumni. As a catalytic entity, we initiate collaborations with other academic and operations units and help the university move toward full integration of sustainability.

This effort is important to Indiana University because most of our student body and most of our faculty and staff live off campus in Bloomington and Monroe County. Much of our environmental impact, therefore, occurs off campus. Energy effectiveness is a keystone of campus sustainability. Conservation of energy is the most cost-effective way to combat climate change and the adverse environmental and health effects of burning fossil fuels. Buildings account for the vast majority of campus fossil fuel emissions, water use, and waste. Buildings and the infrastructure that serves them offer the greatest opportunity for cost-effective conservation, as detailed in the IU Campus Master Plan and the Integrated Energy Master Plan.

The IU Office of Sustainability will support this initiative by providing experts to serve on committees, connecting university faculty and students with research challenges related to this effort, and through communications with our faculty, staff and students who make up a large portion of the local population.

The IU Office of Sustainability pledges our full support to the City of Bloomington and Monroe County's pursuit of the Georgetown University Energy Prize. We will support our local GUEP team's efforts to develop innovative programs, policies, and solutions that will result in significant and sustainable reductions in local energy usage. We are excited to join in this important effort, and look forward to helping make Bloomington and Monroe County model communities for energy efficiency.

Sincerely,

June 24, 2014

William M. Brown, AIA Director of Sustainability





Your bank. For life.

October 14, 2014

Old National Bank is committed to supporting the City of Bloomington and Monroe County in the Georgetown University Energy Prize. Old National recognizes our responsibility to effectively manage our social, cultural, and economic resources in partnership with our associates, clients, vendors, and communities. We seek to accomplish this by continually examining our organizational practices and our role in cultivating strong and sustainable communities, now and for future generations. While headquartered in Evansville, Indiana, Old National has a substantial presence in Bloomington and Monroe County with 6 full service Banking Centers, a Business Center and a Training Center staffed with 81 associates in this service area.

Old National Sustainability Director Janet Baas is a major proponent of "green" initiatives. In fact, she is the founder of Old National's Sustainability Steering Committee, which is focused on building environmental consciousness. Baas is quick to point out that Old National's approach to sustainability is not limited to environmental concerns. "Being green is certainly important, but sustainability is about something even greater," she said. "Our focus and intent at Old National is to help strengthen our organization and other organizations through partnerships, sponsorships, financial literacy and associate volunteerism." Locally, Maria Viorisi, Vice President and Trust Administrator in the Bloomington office of Wealth Management, provides input and insights on this committee.

Our goal in establishing this committee is to not only minimize our environmental impact, but also to have a positive influence on society. Old National strives to be a leader in the communities we serve by leading by example.

Old National is committed to not only supporting Bloomington and Monroe County in the Georgetown University Energy Prize competition initiative, but also is dedicated to:

1. Providing ongoing associate education and awareness
2. Establishing an internal scorecard for measuring sustainability metrics
3. Being a source for volunteers as needed on committees, work projects, education, etc.

As a business, our energy usage will not be calculated in the competition. However, we will internally promote decreasing energy usage during the competition. Our goal in supporting this effort is two-fold: promoting and supporting our community while also creating a model which can be used in other Old National communities.

Sincerely,

A handwritten signature in black ink that reads 'Mark D. Bradford'.

Mark D. Bradford
Region CEO

GEORGETOWN UNIVERSITY
ENERGY PRIZE

LETTER OF SUPPORT
UTILITY

Duke Energy (name of "Utility"), through this letter of commitment, expresses its support of Monroe County Indiana's (name of "Community") effort to compete in the Georgetown University Energy Prize ("GUEP") and its commitment to provide timely, accurate, energy data as required by the Competition Guidelines (see guep.georgetown.edu/rules-timeline).

Utility provides the following energy services to the below types of customers within the Community (check all that apply):

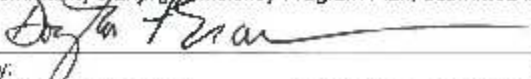
- | | |
|--|---|
| <input checked="" type="checkbox"/> Electric | <input checked="" type="checkbox"/> Residential Customers |
| <input type="checkbox"/> Natural Gas | <input checked="" type="checkbox"/> Municipal Customers |

Utility will support Community's GUEP effort by providing the Georgetown University Energy Prize, quarterly, with the total (aggregate) monthly energy directly supplied by natural gas and electric utilities to all of their residential and municipal customers in the community, as well as the current number of residential accounts. Aggregate data will be reported separately for the residential and municipal sectors.

Utility will work with Community to comply with all current and future energy data requirements in the Competition Guidelines. Georgetown University is working with our partners and communities in the Letter of Intent Program to ensure that data requirements are as simple as possible, however, it is ultimately the Community and the Utility's responsibility to ensure that data is supplied.

Utility understands that Georgetown University will use the energy to: (1) administer the GUEP Competition and select the Finalists in accordance with the Competition Guidelines; (2) educate the public through our Competition Dashboard, as well as other media outlets; (3) conduct research directly and in conjunction with collaborating organizations; and (4) conduct all other activities consistent with the Master Team Agreement signed by Community during Phase 1 and Phase 2 of the Competition.

Utility may provide additional support for the Community's GUEP effort, consistent with the Community's Energy Efficiency Program Plan, submitted in Phase 2 of the Competition.

By:  (date) Jan 25, 2014
Douglas F. Esamann (Name of Representative) President (Title)
Duke Energy (Organization)
1000 East Main Street (Street Address)
Plainfield, IN 46168 (City, State Zipcode)

guep.georgetown.edu



**LETTER OF SUPPORT
UTILITY**

South Central Indiana REMC (name of "Utility"), through this letter of commitment, expresses its support of Monroe County's (name of "Community") effort to compete in the Georgetown University Energy Prize ("GUEP") and its commitment to provide timely, accurate, energy data as required by the Competition Guidelines (see guep.georgetown.edu/rules-timeline).

Utility provides the following energy services to the below types of customers within the Community (check all that apply):

- | | |
|--|--|
| <input checked="" type="checkbox"/> Electric | <input type="checkbox"/> Residential Customers |
| <input type="checkbox"/> Natural Gas | <input type="checkbox"/> Municipal Customers |

Utility will support Community's GUEP effort by providing the Georgetown University Energy Prize, quarterly, with the total (aggregate) monthly energy directly supplied by natural gas and electric utilities to all of their residential and municipal customers in the community, as well as the current number of residential accounts. Aggregate data will be reported separately for the residential and municipal sectors. Using the optional Attachment A, Utility may describe their prospective data collection capabilities and provide feedback to GUEP.

Utility will work with Community to comply with all current and future energy data requirements in the Competition Guidelines. Georgetown University will continue working with our partners and with interested communities to ensure that data requirements are as simple as possible, however, it is ultimately the Community and the Utility's responsibility to ensure that data is supplied.

Utility understands that Georgetown University will use the energy to: (1) administer the GUEP Competition and select the Finalists in accordance with the Competition Guidelines; (2) educate the public through our Competition Dashboard, as well as other media outlets; (3) conduct research directly and in conjunction with collaborating organizations; and (4) conduct all other activities consistent with the Master Team Agreement signed by Community during Phase 1 and Phase 2 of the Competition.

Utility may provide additional support for the Community's GUEP effort, consistent with the Community's Energy Efficiency Program Plan, submitted in Phase 2 of the Competition.

By: Rick McKinney (Name of Representative) 6/11/2014 (date) _____ (Title)
South Central Indiana REMC _____ (Organization)
300 Morton Ave. _____ (Street Address)
Martinsville, Indiana 46151 _____ (City, State Zipcode)

enr@georgetown.edu

**GEORGETOWN UNIVERSITY
ENERGY PRIZE**

**LETTER OF SUPPORT
UTILITY**

UTILITIES DISTRICT OF WESTERN IN. (RUW) (name of "Utility"), through this letter of commitment, expresses its support of Bloomington, IN. (name of "Community") effort to compete in the Georgetown University Energy Prize ("GUEP") and its commitment to provide timely, accurate, energy data as required by the Competition Guidelines (see gucc.georgetown.edu/rules/index.html).

Utility provides the following energy services to the below types of customers within the Community (check all that apply).

☒ Electric

☐ Natural Gas

☒ Residential Customers

☐ Municipal Customers

Utility will support Community's GUEP effort by providing the Georgetown University Energy Prize, quarterly, with the total (aggregate) monthly energy directly supplied by natural gas and electric utilities to all of their residential and municipal customers in the community, as well as the current number of residential accounts. Aggregate data will be reported separately for the residential and municipal sectors. Using the optional Attachment A, Utility may describe their prospective data collection capabilities and provide feedback to GUEP.

Utility will work with Community to comply with all current and future energy data requirements in the Competition Guidelines. Georgetown University will continue working with our partners and with interested communities to ensure that data requirements are as simple as possible; however, it is ultimately the Community and the Utility's responsibility to ensure that data is supplied.

Utility understands that Georgetown University will use the energy to: (1) administer the GUEP Competition and select the Finalists in accordance with the Competition Guidelines; (2) educate the public through our Competition Dashboard, as well as other media outlets; (3) conduct research directly and in conjunction with collaborating organizations; and (4) conduct all other activities consistent with the Master License Agreement signed by Community during Phase 1 and Phase 2 of the Competition.

Utility may provide additional support for the Community's GUEP effort, consistent with the Community's Energy Efficiency Program Plan, submitted in Phase 2 of the Competition.

By: Brian L. Sparks (date) 6-12-2014
By: BRIAN L. SPARKS (Name of Representative) CHIEF EXECUTIVE OFFICER (Title)
UTILITIES DISTRICT OF WESTERN INDIANA (RUW) (Organization)
1446 WEST ST RD 54 (Street Address)
BLOOMFIELD, INDIANA 47424 (City, State Zipcode)

**GEORGETOWN UNIVERSITY
ENERGY PRIZE**

**LETTER OF SUPPORT
UTILITY**

Vectren Corporation

(name of "Utility"), through this letter of commitment, expresses its support of Monroe County (name of "Community"), IN IN 's (name of "Community") effort to compete in the Georgetown University Energy Prize ("GUEP") and its commitment to provide timely, accurate, energy data as required by the Competition Guidelines (see guep.georgetown.edu/rules_timing).

Utility provides the following energy services to the below types of customers within the Community (check all that apply):

☐ Electric

☒ Natural Gas

☒ Residential Customers

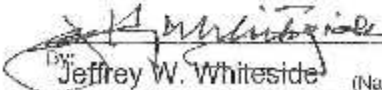
☒ Municipal Customers

Utility will support Community's GUEP effort by providing the Georgetown University Energy Prize, quarterly, with the total (aggregate) monthly energy directly supplied by natural gas and electric utilities to all of their residential and municipal customers in the community, as well as the current number of residential accounts. Aggregate data will be reported separately for the residential and municipal sectors. Using the optional Attachment A, Utility may describe their prospective data collection capabilities and provide feedback to GUEP.

Utility will work with Community to comply with all current and future energy data requirements in the Competition Guidelines. Georgetown University will continue working with our partners and with interested communities to ensure that data requirements are as simple as possible, however, it is ultimately the Community and the Utility's responsibility to ensure that data is supplied.

Utility understands that Georgetown University will use the energy for: (1) administer the GUEP Competition and select the Finalists in accordance with the Competition Guidelines; (2) educate the public through our Competition Dashboard, as well as other media outlets; (3) conduct research directly and in conjunction with collaborating organizations; and (4) conduct all other activities consistent with the Master Team Agreement signed by Community during Phase 1 and Phase 2 of the Competition.

Utility may provide additional support for the Community's GUEP effort, consistent with the Community's Energy Efficiency Program Plan, submitted in Phase 2 of the Competition.


By: **Jeffrey W. Whiteside**

(Name of Representative)

June 16, 2014

(date)

VP, Community Sustainability & Pres., Vectren Foundation

Vectren Corporation

(Organization)

P O Box 209, 211 NW Riverside Dr.

(Street Address)

Evansville, IN 47708

(City, State Zipcode)

Document generated by Vectren



To the Georgetown University Energy Prize Committee:

SIREN, the Southern Indiana Renewable Energy Network (www.sirensolar.org), is pleased to support the application of the City of Bloomington and Monroe County, Indiana for the Georgetown University Energy Prize. SIREN is a non-profit, volunteer-driven organization in operation since 2007 that promotes renewable energy in southern Indiana. We are a project of the Center for Sustainable Living (www.simplycsl.org), a 501(c)3 organization.

SIREN sponsored the first local community-wide energy conservation challenge in 2010 with a year-long contest that awarded prizes to participants who achieved the greatest percentage reduction in their electricity usage. The winner reduced their household consumption by 46%. Collectively, more than 11.5 megawatt hours of electricity were saved by the Energy Showdown contestants. Since then, SIREN has persistently promoted both grid energy conservation and renewable energy alternatives. We have assisted Monroe County with grant writing and technology evaluation for two large-scale public sector photovoltaic (PV) arrays—for the County's administrative offices (2011) and the Justice building, containing both the courts and the jail (2014)—and provided similar assistance to six churches in Bloomington and Indianapolis.

We regularly give free, public educational events for home and business owners who are thinking of going solar. We advocate a 50/50 solution to their energy needs: cut current energy consumption by 50% and replace the rest with renewable energy sources. Over 600 people have attended our Going Solar presentations since 2011, and these events have contributed to the rapid spread of renewable energy generation in Monroe County and beyond. Our [Solar Inventory Database](#) lists over 100 PV sites county-wide. Monroe County is only one among Indiana's 92 counties, with just over 2% of the population, yet it contains more than 20% of Indiana's total number of solar installations. These sites represent more than one third of the solar net metering customers in Duke Energy's Indiana service territory, which comprises 69 counties in all. We have personally assisted the owners of most of these installations.

The Georgetown University Energy Prize competition is important to SIREN because it will increase community awareness and understanding of energy issues. That aligns with



Earth Care

The Bloomington affiliate of Hoosier Interfaith Power and Light
Bringing Hoosiers of faith together to help curb global climate change

With this letter Earth Care Bloomington expresses its support of Monroe County Indiana's effort to compete in the Georgetown University Energy Prize ("GUEP"). Established in 2007, membership includes twenty-five percent of local congregations. Earth Care is one of the founders and the local affiliate of State-wide Hoosier Interfaith Power and Light (H-IPL). H-IPL, in turn, is one of forty IPLs nation-wide that work to engage people of faith together to fight climate change. Our members see caring for our Earth as our sacred responsibility.

Earth Care continues to reach out to other congregations by offering free workshops, building walk-throughs and arranging for free professional energy audits. The Steering Committee sets policy and strategic direction. Most activities are organized through working groups. Current or past working groups include the Cut Your Carbon Working Group, Earth Care Green Team, Speak Up for the Earth Working Group, Walbicus to Worship Working Group and Using Energy Prudently Working Group. A Clergy Advisory Council helps with outreach and advocacy.

Earth Care collaborates with the Monroe County Religious Leaders, the U.S. Green Building Council, the Center for Sustainability, Southern Indiana Renewable Energy Network (SIREN) and the Bloomington Commission on Sustainability. Members have done free home audits as part of the City's Beat the Meter Blitz.

See the accompanying list of Earth Care activities and programs.

<http://www.earthcareindiana.org/>

<http://www.hoosieripl.org/>

Appendix IV Monroe County Demographic Information

Monroe County, Indiana

The information below includes the City of Bloomington, Town of Ellettsville, home to 6,400 residents and the Town of Stinesville, home to 195 residents.

People QuickFacts	Monroe County	Indiana
Population, 2013 estimate	141,888	6,570,902
Population, 2010 (April 1) estimates base	137,969	6,483,797
Population, percent change, April 1, 2010 to July 1, 2013	2.8%	1.3%
Population, 2010	137,974	6,483,802
Persons under 5 years, percent, 2013	4.5%	6.4%
Persons under 18 years, percent, 2013	16.0%	24.1%
Persons 65 years and over, percent, 2013	11.0%	13.9%
Female persons, percent, 2013	50.3%	50.7%

White alone, percent, 2013 (a)	87.8%	86.3%
Black or African American alone, percent, 2013 (a)	3.5%	9.5%
American Indian and Alaska Native alone, percent, 2013 (a)	0.3%	0.4%
Asian alone, percent, 2013 (a)	6.0%	1.9%
Native Hawaiian and Other Pacific Islander alone, percent, 2013 (a)	0.1%	0.1%
Two or More Races, percent, 2013	2.3%	1.8%
Hispanic or Latino, percent, 2013 (b)	3.2%	6.4%
White alone, not Hispanic or Latino, percent, 2013	85.2%	80.7%

Living in same house 1 year & over, percent, 2008-2012	67.5%	84.7%
Foreign born persons, percent, 2008-2012	7.7%	4.6%
Language other than English spoken at home, pct age 5+, 2008-2012	9.7%	8.1%
High school graduate or higher, percent of persons age 25+, 2008-2012	91.8%	87.0%
Bachelor's degree or higher, percent of persons age 25+, 2008-2012	43.3%	23.0%
Veterans, 2008-2012	7,290	468,648
Mean travel time to work (minutes), workers age 16+, 2008-2012	18.3	23.2

Housing units, 2013	59,548	2,809,447

Homeownership rate, 2008-2012	54.2%	70.6%
Housing units in multi-unit structures, percent, 2008-2012	34.7%	18.5%
Median value of owner-occupied housing units, 2008-2012	\$155,300	\$123,400
Households, 2008-2012	53,894	2,478,846
Persons per household, 2008-2012	2.29	2.54
Per capita money income in past 12 months (2012 dollars), 2008-2012	\$22,869	\$24,558
Median household income, 2008-2012	\$38,675	\$48,374
Persons below poverty level, percent, 2008-2012	25.0%	14.7%
Business QuickFacts	Monroe County	Indiana
Private nonfarm establishments, 2012	2,942	143,974 ¹
Private nonfarm employment, 2012	48,975	2,512,908 ¹
Private nonfarm employment, percent change, 2011-2012	4.0%	3.0% ¹
Nonemployer establishments, 2012	8,589	387,735

Total number of firms, 2007	10,571	482,847
Black-owned firms, percent, 2007	1.8%	4.6%
American Indian- and Alaska Native-owned firms, percent, 2007	S	0.5%
Asian-owned firms, percent, 2007	2.3%	1.8%
Native Hawaiian and Other Pacific Islander-owned firms, percent, 2007	F	0.0%
Hispanic-owned firms, percent, 2007	1.5%	1.8%
Women-owned firms, percent, 2007	25.2%	26.8%

Manufacturers shipments, 2007 (\$1000)	1,799,286	221,877,814
Merchant wholesaler sales, 2007 (\$1000)	683,154	67,634,947
Retail sales, 2007 (\$1000)	1,530,793	78,745,589
Retail sales per capita, 2007	\$11,968	\$12,408
Accommodation and food services sales, 2007 (\$1000)	287,796	11,669,759
Building permits, 2012	421	13,781
Geography QuickFacts	Monroe County	Indiana
Land area in square miles, 2010	394.51	35,826.11
Persons per square mile, 2010	349.7	181.0
FIPS Code	105	18
Metropolitan or Micropolitan Statistical Area	Bloomington, IN Metro Area	

1: Includes data not distributed by county.

(a) Includes persons reporting only one race.

(b) Hispanics may be of any race, so also are included in applicable race categories.

D: Suppressed to avoid disclosure of confidential information

F: Fewer than 25 firms

FN: Footnote on this item for this area in place of data

NA: Not available

S: Suppressed; does not meet publication standards

X: Not applicable

Z: Value greater than zero but less than half unit of measure shown

Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, American Community Survey, Census of Population and Housing, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits. <http://quickfacts.census.gov/qfd/states/18/18105.html>

Last Revised: Tuesday, 08-Jul-2014 06:43:58 EDT

Appendix V City of Bloomington Demographic Information

Bloomington (city), Indiana

People QuickFacts	Bloomington	Indiana
Population, 2013 estimate	82,575	6,570,902
Population, 2012 estimate	82,212	6,537,782
Population, 2010 (April 1) estimates base	80,307	6,483,797
Population, percent change, April 1, 2010 to July 1, 2013	2.8%	1.3%
Population, percent change, April 1, 2010 to July 1, 2012	2.4%	0.8%
Population, 2010	80,405	6,483,802
Persons under 5 years, percent, 2010	3.9%	6.7%
Persons under 18 years, percent, 2010	11.4%	24.8%
Persons 65 years and over, percent, 2010	7.9%	13.0%
Female persons, percent, 2010	49.7%	50.8%

White alone, percent, 2010 (a)	83.0%	84.3%
Black or African American alone, percent, 2010 (a)	4.6%	9.1%
American Indian and Alaska Native alone, percent, 2010 (a)	0.3%	0.3%
Asian alone, percent, 2010 (a)	8.0%	1.6%
Native Hawaiian and Other Pacific Islander alone, percent, 2010 (a)	0.1%	0.0%
Two or More Races, percent, 2010	3.0%	2.0%
Hispanic or Latino, percent, 2010 (b)	3.5%	6.0%
White alone, not Hispanic or Latino, percent, 2010	81.1%	81.5%

Living in same house 1 year & over, percent, 2008-2012	53.2%	84.7%
Foreign born persons, percent, 2008-2012	11.4%	4.6%
Language other than English spoken at home, pct age 5+, 2008-2012	13.9%	8.1%
High school graduate or higher, percent of persons age 25+, 2008-2012	93.1%	87.0%
Bachelor's degree or higher, percent of persons age 25+, 2008-2012	56.3%	23.0%
Veterans, 2008-2012	2,958	468,648
Mean travel time to work (minutes), workers age 16+, 2008-2012	15.6	23.2
Housing units, 2010	33,239	2,795,541
Homeownership rate, 2008-2012	33.9%	70.6%
Housing units in multi-unit structures, percent, 2008-	52.9%	18.5%

2012		
Median value of owner-occupied housing units, 2008-2012	\$173,200	\$123,400
Households, 2008-2012	30,295	2,478,846
Persons per household, 2008-2012	2.18	2.54
Per capita money income in past 12 months (2012 dollars), 2008-2012	\$18,909	\$24,558
Median household income, 2008-2012	\$27,116	\$48,374
Persons below poverty level, percent, 2008-2012	38.5%	14.7%
Business QuickFacts	Bloomington	Indiana
Total number of firms, 2007	6,012	482,847
Black-owned firms, percent, 2007	2.8%	4.6%
American Indian- and Alaska Native-owned firms, percent, 2007	S	0.5%
Asian-owned firms, percent, 2007	S	1.8%
Native Hawaiian and Other Pacific Islander-owned firms, percent, 2007	F	0.0%
Hispanic-owned firms, percent, 2007	2.2%	1.8%
Women-owned firms, percent, 2007	24.0%	26.8%

Manufacturers shipments, 2007 (\$1000)	D	221,877,814
Merchant wholesaler sales, 2007 (\$1000)	450,570	67,634,947
Retail sales, 2007 (\$1000)	1,267,805	78,745,589
Retail sales per capita, 2007	\$17,845	\$12,408
Accommodation and food services sales, 2007 (\$1000)	268,019	11,669,759
Geography QuickFacts	Bloomington	Indiana
Land area in square miles, 2010	23.16	35,826.11
Persons per square mile, 2010	3,472.0	181.0
FIPS Code	05860	18

(a) Includes persons reporting only one race.

(b) Hispanics may be of any race, so also are included in applicable race categories.

D: Suppressed to avoid disclosure of confidential information

F: Fewer than 25 firms

FN: Footnote on this item for this area in place of data

NA: Not available

S: Suppressed; does not meet publication standards

X: Not applicable

Z: Value greater than zero but less than half unit of measure shown

Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, American Community Survey, Census of Population and Housing, County Business Patterns, Economic Census, Survey of Business Owners, Building Permits, Census of Governments.
Last Revised: Tuesday, 08-Jul-2014 06:43:57 EDT

Appendix VI County Utility Accounts

Monroe County

Vectren Accounts

- Youth Services Bureau – main building and an additional building called the Annex
- Health Building
- Historic County Courthouse – VA Memorial flame, Pre- and post- 2014 accounts numbers
- Fiscus Building
- Charlotte T. Zietlow Justice Center – Houses County jail, courts, and offices. (All one account)
- Highway Garage
- Parks Department – Caretakers' house, Commons, maintenance
- Johnson Hardware Building – four meters
- Monroe County Airport – Administration, ARFF, ATCT Tower, Maintenance Shop, SRE, Terminal, and one additional building

Duke Energy Accounts

- Youth Services Bureau and Annex
- Health Building (Building meter and outdoor lighting meter)
- Courthouse
- Fiscus Building
- Justice Building (plus a parking lot meter)
- Curry Building
- Airport (South Lift station on Duke)
- Visitors Bureau
- Highway Department (13 accounts for various lights and buildings)
- Parks Department (Entrance Sign, Commons, Caretaker house & Shelter 7, Shelter 3,4,& 5 – restroom, Splash Pad, Shelters 1,2 & restroom, Athletic Fields, Athletic Fields 3&4, Athletic Fields 6 & 7, outdoor Lighting, Detmer Park, Parks Maintenance Building), Johnson Hardware Building (seven sub-metered accounts)
- Historic Showers Building

Appendix VII City of Bloomington Utility Accounts

Duke Energy Accounts		
Facility	Account #	Location
Animal	7350-3531-01-9	
Animal Outdoor	9740-2837-01-6	
City Hall	8220-2673-01-1	
Convention Parking	4200-2821-01-4	
Evidence Security Light	9050-2837-01-9	
Fire 1	2850-2825-01-3	
Fire 2 (Fairfield)	2490-2805-01-6	
Fire 2 (S. Rogers)	0990-2810-01-0	
Fire 3	0510-2822-01-5	
Fire 3 Exterior Light	1070-3652-01-3	
Fire 4	4380-2833-01-7	
Fire 5	0140-2835-01-6	
Fleet	9140-2835-01-5	
GA/4th St Garage	0320-2673-01-4	
GB/Walnut St Garage	4940-2823-01-0	
GM/Morton St - electric station	0230-3757-01-8	
GM/Morton St Garage	4950-2811-02-8	
Irrigation System	2900-2787-01-4	
Irrigation System	1900-2787-01-9	
Irrigation System	3900-2787-01-0	
Mayflower Back Lot	7640-2811-01-0	
Mayflower Exterior	0400-2674-01-2	
Mayflower Sidewalk Light	9300-2674-01-5	
Police Building	3720-2673-01-6	
Police Exterior Lights	1850-2825-01-8	
Police Firing Range	7350-3674-01-4	
Salt Dome	7140-2835-01-4	
Sanitation Building	7740-2837-01-5	
Street	6140-2835-01-9	
Traffic	3400-2814-01-5	
Facility	Account #	Address
Dillman Plant	2770-2673-01	100 W Dillman Rd
Monroe Intake Tower	5920-2673-01	Moores Creek Water Tower
Monroe Plant	6920-2673-01	7470 S Shields Ridge Rd
Office	1140-3651-01	600 E Miller Dr
City of Bloomington Utilities	3050-2673-01	609 S Smith Rd
Booster Station	8260-3755-01	4101 S Harrell Rd
Monroe Plant	8840-3761-01	7470 S Shields Ridge Rd
Vernal Pike Lift Station	1150-3726-03	5550 W Vernal Pike

Knight Ridge Lift Station	2130-3754-01	400 S SR 446
Dogwood Booster	2200-2815-01	2603 E Moffet Ln
Vernal Pike Lift Station	2960-3728-02	2904 W Vernal Pike
Azelea Ln Lift Station	0130-2794-01	1036 E Azelea Ln
Gentry E Lift Station	0130-2825-01	986 S SR 446
Woodhaven Dr Lift Station	0140-2812-01	3334 W Woodhaven Dr
Hype Park Edwards Lift Station	0830-2838-01	3506 William Ct
Jeffrey Rd Lift Station	1940-2830-01	3913 Jeffrey Rd
Barge Lane SW Tank	1950-2809-01	4065 W Barge Ln
Griffy Plant	2430-2673-03	3501 N Dunn St
Booster Station	2860-2801-01	1075 W 17th St
Rusgan Dr Lift Station	4140-2795-01	205 Rusgan Dr
Cromwell Lift Station	4990-3511-02	4650 Cromwell Ct
Water Tank	5140-2835-01	600 E Miller Dr
Oolitic Lift Station	5880-2801-01	1681 W 12th St
Office Building	6050-2837-01	300 W Gordon Pike
Redbud Tower	8550-2786-01	1355 SR 46
Garage	8620-2826-01	423 S Washington St
Hearthstone Lift Station	0390-2824-01	1450 S SR 446
Lift Station	0430-2673-02	4425 E Moores Pike
Cedar Chase Lift Station	1210-2812-02	Cedar Chase Dr
Hyde Park Olcott Lift Station	1730-2673-01	3007 1/2 S Olcott Blvd
Lift Station	2330-2673-02	800 N Waynes Ln
Profile Parkway Lift Station	2850-2808-01	Profile Parkway
Micro Motors Lift Station	2980-3546-01	241 E Grimes Ln
Lift Station	3330-2673-02	1400 N Monroe St
Lift Station	3430-2673-02	600 E Miller Dr
Booster	3510-2817-01	N Russell Rd
Park 37 Lift Station	3830-2790-01	2010 Liberty Dr
Lift Station	3840-2673-01	4517 Morningside Dr
Lift Station	4330-2673-02	558 N Plymouth Rd
Tamarron Lift Station	4480-2673-01	3660 Tamarron Dr
Curry Pike Davis Lift Station	4570-2809-01	2455 N Curry Pike
Arlington Park Lift Station	4600-2802-01	1900 N Arlington Park
Monroe Hospital Lift Station	4650-3628-02	4011 Tiwari Blvd
SW Booster	5050-2809-01	1701 Tapp Rd
Lift Station	5330-2673-02	223 E Smith Ave
Prow Rd Lift Station	5380-3705-01	3520 N Prow Rd
South Booster	5430-2673-01	1965 S Henderson St
Cedarview Lift Station	5810-2812-01	3615 S Leonard Springs
Lift Station	6030-2673-01	4305 Glen Oaks Dr
Lift Station	6330-2673-02	700 S SR 446
Basswood Circle Lift Station	6400-2790-01	1161 S Basswood Circle

3rd S Underpass Lift Station	6670-2673-01	300 W 3rd St
Kensington Lift Station	6760-2807-01	3215 E Rogers Rd
Lift Station	6930-2799-01	Stonelake Dr
Curry Industrial Park Lift Station	6930-2808-01	3610 W Jonathan Dr
Cory Ln Lift Station	6970-2789-01	400 S Cory Ln
Lift Station	7330-2673-02	4317 Weymouth Ln
Fairgrounds Lift Station	7360-2809-01	5454 W Airport Rd
Lift Station	7720-2799-01	1100 W 17th St
Lift Station	8330-3564-02	1300 S Adams St
Fullerton Pk Lift Station	9190-3614-02	2200 W Fullerton Pk
Lift Station	9330-2673-02	700 N Park Ridge Rd
NW Park Lift Station	9660-2814-01	4801 Loesch Rd
Vernal Pk Lift Station	9700-3676-02	4900 W Vernal Pk
Winston Thomas Lift Station Lighting	0150-2837-01	230 W Gordon Pk
Griffy Plant 100 W Lighting	0330-2795-01	N Dunn St
Park Ridge Lift Station Lighting	0690-2792-01	700 N Park Ridge Rd
West Tank Lighting	0930-2808-01	800 N Waynes Ln
W 3rd St Lift Station Lighting	2610-2806-01	1700 W 3rd St
Westwood Lift Station Lighting	3530-2809-01	4321 W Glen Oaks Dr
Griffy Plant 175 W Lighting	4130-2788-01	N Dunn St
East Booster Lighting	4880-2812-01	4425 E Moores Pike
Winston Thomas Lagoon Lighting	8740-2837-01	300 W Gordon Pk
349. S Washington	2140-2825-01	
511 E Kirkwood Ave Prk	6100-2826-01	
9th St Restroom	7420-2801-01	
9th St. Tennis	8520-2801-01	
Banneker	5420-2806-01	
B-Line #1	4090-3693-01	
B-Line #2	8980-3693-01	
B-Line Trail	4870-2813-03	
B-Line Trail 1145 B Line Trail S	7460-3726-01	
Bryan Mt.	5190-2791-01	
Bryan Park	5980-2791-01	
Bryan Park	7980-2791-01	
Bryan Pool (runs everything)	6480-2791-01	
Bryan Shelter	6980-2791-01	
Bryan Tennis	5290-2791-01	
Building Trades Pk Sign	7830-2808-01	
Cascades Golf Course	5010-2674-01	
Cascades Park	7950-3607-01	
Clear Crk Trail/Tapp Rd	6130-2830-01	
Crestmont	6180-2801-01	
FSC (Large Power Acct.)	7430-2673-01	
Goat Farm	9860-2799-02	
Golf Clubhouse	9670-2788-01	
L. Ballfields	9050-2795-01	

L. Cascades N.	6450-2795-01	
L. Cascades Park	7450-2795-01	
Leonard Springs Nature Center	5860-2812-01	
Lower Golf Cart	8670-2788-01	
Maintenance Bldg-545 S Adams	9710-2810-02	
Mills Pool	6960-2801-01	
Park Ridge W.	9710-2792-01	
Peoples Park	9040-2786-01	
Rails to Trails	7580-2811-01	
Rose Hill Maint	4810-2810-01	
S. Shelter	8450-2795-01	
Sherwood Oaks	6090-2832-01	
Thompson	9650-2834-01	
TLRC	0670-2673-02	
Trades Rest- 700 W Howe St	8630-2811-01	
Trail by Winslow	6970-2794-01	
Twin Lakes	4390-2789-01	
Twin Lakes Lodge	5390-2789-01	
Upper Golf Cart	7670-2788-01	
Wapehani Park	7010-2674-01	
West 9th St.	6420-2801-01	
Winslow Tennis	7010-2837-01	
Public Works accounts: streetlights		
Location	Account #	# of lights
S. Walnut Streetscape Project-W. Smith Ave to W. 3rd St (Installed 2013)	0460-3769-01-0	4
Bridgestone	0500-2674-01-9	5
Kinser Pk-Acuff & Bayles	0570-3670-01-8	1
Southern Dr.	0590-3650-01-1	1
Grandview	0720-2787-01-5	1
Ralston Dr	0730-3703-01-7	2
17th & Lindbergh (Installed 2011)	0850-3737-01	1
Gentry Honours	0990-2673-01-3	15
Rosewood Addition-Bricklin Ct (Installed 2011)	1080-3722-01	5
S Sare and E Rogers Rd (Removed 2012)	1200-3714-01-0	0
Dunn & Smith Ave	1220-3549-01-4	2
Kirkwood Ave.	1490-2673-01-7	34
Brookstone	1500-2674-01-4	4
St. Remy Circle	1600-2674-01-0	1
Ridgefield	1600-3673-01-8	3
W Kirkwood Streetscape-314 W Kirkwood Ave	1760-3732-01-4	17
Sare & Cathcart	1830-3717-01	2
Wash. St (middleway project)	1850-3658-01-8	1
Canada Farms-Woodfield	1900-2674-01-0	6
11th betw. Vernal & Illinois	1990-3542-01-5	4
N. Monroe St. (Monroe & Gourley)	2120-3579-01-0	1
112 1/2 N. Walnut (East Side)	2130-2823-01-1	8

St James Woods	2220-3565-01-5	1
Renwick roundabout	2230-3662-01-8	2
Sugarberry Ct	2510-3707-01-6	2
W 3rd Street Project-Landmark to Franklin (Installed 2011)	2550-3746-01-0	31
St. Remy	2600-2674-01-6	4
Hunter Ave West of Rose (Installed 2011)	2670-3734-01	1
St. James Woods	2700-3673-01-0	1
Tapp & Adams	2790-3619-01-0	3
Canada Farms-Southern Oak	2800-2674-01-9	5
1407 S Dunn St	2820-3700-01-8	2
Wylie & Dunn St	2930-3760-01-4	1
Smith Rd & McCracken Way (Installed 2011)	2960-3735-01-1	1
SR 45 on Liberty	2990-2673-01-4	20
Coppertree Phase 2	3000-2674-01-3	5
Sherbrooke Dr.	3150-3617-01-6	10
Longview Ave	3170-3679-01-6	1
Clarizz Blvd (Installed 2010)	3170-3728-01-7	4
Canada Farms-Cedarwood	3240-3560-01-3	7
Hearthstone	3330-3516-01-3	2
5th St. (Union-Clark)	3330-3645-01-8	1
715 Rogers St/N Madison St (Installed 2011)	3360-3735-01	1
Rockport Rd.	3400-2674-01-9	5
1325 Hickory Ln	3460-3679-01-8	1
W Kirkwood Ave	3510-3624-01-9	9
Laurelwood	3600-2674-01-1	8
109 W. 6th (alley)	3790-2826-01-8	1
1303 S Dunn St	3820-3700-01-3	2
711 W Graham Dr	3840-3679-01-9	1
1413 E 17th Street (Installed 2010)	3840-3719-01-0	3
400 block S. Morton St.	3930-3636-01-7	1
113 N. College (West Side-Christmas Lights)	3940-2811-01-7	7
Southern Pines	3960-3607-01-9	5
Weimer Rd & Sudbury Dr	4000-3676-01-5	1
Wintersweet Dr	4170-3726-01-0	1
112 1/2 W. 6th St (North Side)	4190-2820-01-7	8
Bent Tree	4200-2674-01-1	6
Walnut Creek	4600-2674-01-7	7
Claybridge and Sandberg	4740-3771-01-1	1
Kirkwood	4830-3537-01-8	45
Pete Ellis and Amy Lane (Installed 2013)	4890-3771-01	1
Kendall Dr	4970-3652-01-7	3
Ind. Ave 15-17th St	5060-3573-01-0	4
Sare Rd & Rhorer Rd (Installed 2010)	5070-3724-01-6	1
N. Oaks Subd-Xavier Ct	5110-3530-01-0	3
Woods Edge Bend (Installed 2013)	5110-3772-01-3	1
Graham Dr.	5200-2674-01-7	8
S Fess between Atwater & 3rd St	5280-3687-01-3	1
625 W Duncan Dr (Installed 2011)	5290-3738-01	1
Hyde Park	5300-2674-01-3	13
Hawthorne St.	5390-2673-01-2	20
Heritage Road (Installed 2011)	5470-3732-01-4	1

S. Walnut Streetcape Project-W. 2nd St to W. Smith Ave (Installed 2013)	5530-3780-01-6	7
S Rogers St (LED Lights Patterson to Wylie) Installed 2011	5620-3732-01-0	9
S Henderson St-Thornton & Melrose (Installed 2010)	5650-3717-01-3	1
Gentry Blvd.	5670-3517-01-9	1
Sweetbriar	5700-2674-01-9	9
Wingfield Dr E	5830-3627-01-2	8
N Arlington Rd & W 20th St	5830-3703-01-0	1
17th & Crescent Rd (Crescent Bend & Pointe) (Installed 2010)	5870-3727-01-6	5
Canada Farms-Claybridge	5900-2674-01-1	7
N. Lincoln St and E 6th St (HAND Grant) (Installed 2012)	5910-3770-01-1	1
Arbor Ridge Subdivision (Installed 2011)	6000-3723-01	5
S Rogers St (LED Lights Hillside to Patterson)	6070-3427-01-0	9
Winslow Farms	6200-2674-01-2	11
Winslow Farms	6300-2674-01-9	6
General Account	6390-2673-01-8	414
Kensington Park	6430-3547-01-9	2
Fess Ave & 12th St	6600-3640-01-0	1
Covenanter Dr.	6690-2673-01-7	7
E Dunstan Dr (Installed 2010)	6730-3717-01	1
Woodbine Ct.	6750-3573-01-3	1
S. Walnut Pk and Winslow Rd	7000-3543-01-1	1
S Covey Ln	7120-3694-01-0	1
Wylie Farms	7200-2674-01-8	3
2601 N Dunn	7220-3516-01-1	1
Southern Dr & Henderson (500 Southern)	7280-3707-01-5	1
Arbutus Dr.	7380-3615-01-0	1
DLS Street Lights	7390-2673-01-3	249
Jackson Mill	7530-3648-01-1	5
Meadow Ridge	7590-2673-01-6	11
Gentry Honours	7660-3618-01-3	12
606 W Chambers Dr	7700-3697-01-3	1
200 W. 3rd St.	7810-2811-01-0	1
Adams Hill	7830-3619-01-0	8
Hillside & Henderson (Installed 2010)	7870-3727-01	1
St. James Woods	7900-2674-01-2	5
Regents Park	8000-3690-01-0	10
Walnut Street Pike & Henderson Street (Installed 2013)	8110-3772-01-0	1
E Ridgeview Dr-Sunny Slopes (Installed 2010)	8130-3716-01-7	1
Whitetail Run	8200-2674-01-3	1
42 st. lights, Arden and Sycamore, Wind	8390-2673-01-9	1679
Sare & Rogers Road Roundabout (Installed 2012)	8430-3763-01-4	8
Pinestone	8440-3636-01-0	1
Rockport Rd & Ralston Dr (Installed 2011)	8470-3734-01-3	1
Countryside Ln.	8520-3517-01-2	2
Peppergrass	8590-2673-01-1	15
E. 3rd Street btwn Overhill & Sahara Mart Entrance (Installed 2012)	8620-3769-01-8	4
Coppertree Phase 1	8990-2673-01-7	6
Kensington	9000-2674-01-6	26
W. Allen St.	9110-3549-01-4	3
Evergreen Village	9630-3639-01-0	2

Hyde Park	9690-2673-01-3	43
Gentry Estates	9890-2673-01-6	34
Fenbrook	9920-3616-01-1	2
Location	Account #	
Kirkwood & Walnut	0160-3674-01	signal
Hillside & High	0160-3676-01	signal
Old SR 37 & Walnut	0170-3607-01	signal
Bloomfield & Basswood	0230-3638-01	signal
Allen & Patterson	0280-3675-01	signal
4th & College	0540-3675-01	signal
7th & Walnut	0720-3675-01	signal
10th & Jordan	0720-3676-01	signal
2nd & High St	0840-3585-01	signal
3rd & Madison	0850-3675-01	signal
2nd & College Mall	0890-3675-01	signal
4th & Walnut	0930-3675-01	signal
3rd & Walnut/Washington	1060-3575-01	signal
10th & Indiana	1200-3601-01	signal
1st & Walnut	1230-3609-01	signal
Jordan & Law	1360-3676-01	signal
5th & Adams	1380-3675-01	signal
Winslow & Walnut	1410-3597-01	signal
3rd & Kimble	1520-3732-01-2	signal
17th & Walnut	1530-3586-01	signal
High & Rockcreek	1580-3560-01	flasher
10th & Woodlawn	1720-3676-01	signal
2nd & Patterson Dr	1850-3675-01	signal
Walnut & Miller	1930-3675-01	signal
Atwater & Henderson (597 E Atwater Ave)	1980-3742-01-7	signal
3rd & High	2260-3676-01	signal
3rd & Patterson	2280-3675-01	signal
2nd & Adams St.	2440-3581-02	signal
Sare & Rogers	2490-2673-01	flasher
3rd & Cory	2520-3732-01-8	signal
3rd & Woodscrest	2630-3609-01	signal
3rd & Dunn	2840-3522-01	signal
2nd & Walnut	2900-3570-01	signal
Atwater & Woodlawn	2920-3622-02	signal
Moore's & College Mall	3160-3676-01	signal
17th & Kinser	3260-3676-01	signal
Kirkwood & Rogers	3720-3676-01	signal
High & Wimbledon flasher	3820-3633-01	flasher
2nd & Landmark	3850-3675-01	signal
3rd & Lincoln	3900-3570-01	signal
3rd & College	3950-3575-01	signal
10th & Sunrise	3970-3569-01	signal
Henderson & Winslow	4000-3562-01	signal
11th & College	4060-3676-01	signal
3rd & Hawthorne	4160-3676-01	signal
College Mall & Buick	4200-2816-01	signal

6th & College	4250-2811-01	signal
Rockport & Rogers	4260-3676-01	signal
Rogers & Patterson	4280-3675-01	signal
17th & Fee	4460-3608-02	signal
3rd & Landmark	4460-3732-01-1	signal
3rd & Rogers	4620-3675-01	signal
1st & College	4830-3675-01	signal
17th & Dunn	4940-3521-01	signal
Walnut & South	5260-3676-01	signal
Hillside & Walnut	5340-3569-01	signal
Henderson & Hillside	5340-3581-01	signal
Patterson & Fairview	5600-3714-01	signal
3rd & Franklin (New Signal)	5760-3730-01-3	signal
Kirkwood & College	5950-3674-01	signal
3rd & Woodlawn	6060-3676-01	signal
Rogers & Country Club	6130-3697-01	signal
10th & N. College	6140-3549-01	signal
Atwater & Jordan	6330-2826-01	signal
2nd & Walnut	6530-3780-01-1	signal
Smith & Walnut (Installed 2013)	6700-3781-01-9	signal
College Mall & Eastland New signal)	6780-3759-1-1	signal
2nd & Walker	6850-3675-01	signal
7th & College	6950-3676-01	signal
3rd & Indiana	7630-3609-01	signal
420 E 19th St (Hawk Pedestrian Signal)	7640-3747-01-3	ped signal
401 S. Pk. Sq. Dr. flasher	7840-3565-01	flasher
Walnut & North	7920-3622-02	signal
17th & College	8000-3649-01	signal
Walnut & Rhorer/Gordon	8260-3676-01	signal
10th & Walnut	8330-3558-01	signal
6th & Walnut St	8340-3569-01	signal
Walnut & Grimes	8520-3675-01	signal
2624 E 7th St (Pedestrian Signal Bypass Proj)	8550-3766-01-4	ped signal
College Mall & Covenanter	8790-3675-01	signal
(39 lights)-Unmetered Account	9390-2673-01	signal
10th & Fee Ln	9620-3676-01	signal
2nd & Walnut	9710-3782-01-9	signal
Bloomington Transit		
Grimes Bus Garage/offices	6870-2673-01-5	
Downtown Transit Center	6610-301-01-0	
Vectren Energy		
Building	Account #	
Animal	02-600592052-5019542 0	
BPD	02-600006602-5353049 3	

BPD - Fire Range	02-620706310-5911925 8	
Fire-1	02-600174621-5186991 1	
Fire-2	02-600174621-5222813 0	
Fire-3	02-600174621-5519991 3	
Fire-4	02-600174621-5076022 7	
Fire-5	02-600021950-5297304 6	
Fire-OP	02-600174621-5518370 6	
Fleet	02-600477940-5186366 6	
Sanitation	02-600006602-5019544 0	
Street	02-600174621-5241824 7	
Traffic	02-600174621-5241414 3	
CBU Service Building	02-600006602-5463700	600 E MILLER DR
Blucher Poole	02-600006602-5464376	5555 N BOTTOM RD
Dillman	02-600006602-5520392	100 W DILLMAN RD
Monroe	02-600006602-5187802	7470 S SHIELD RIDGE RD
South Booster	02-600494063-5352776	1985 S HENDERSON ST
Allison Jukebox	02-600231879-5353048 5	
Banneker Center	02-600599703-5074500 6	
Bryan Pool	02-600006602-5075516 6	
Frank Southern Center	02-600006602-5057322 8	
Golf Course Clubhouse	02-600298011-5462551 3	
Mills Pool	02-600212450-5240848 9	
Operations Center	02-600006602-5240973 2	
Rosehill Cemetary Office	02-600174621-5462824 9	
Rosehill Cemetary Office	02-600174621-5019055 7	
TLRC	02-600006602-5276562 3	
Twin Lakes Sports Park	02-600635786-5185872 1	

Grimes Bus Garage/Offices	02-600178373-5352416	
SCI REMC Accounts		
Blucher Poole WWTP	2093400200	
UDWI Accounts		
Fieldstone Lift Station	52184-001	

Appendix VIII RBBCSC Utility Accounts

Duke Energy Account Numbers

7250-2673-01-8

0870-2796-01-8

8250-2673-01-3

8770-2796-01-4

6870-2796-02-8

8030-3528-01-0

1150-2797-01-0

9770-2796-01-0

0150-2797-01-4

Vectren gas accounts

5131783-6

5298340-6

5710662-5

5464633-5

5794296-3

5000025-8

Appendix IX Ellettsville Utility Accounts

Utilities Maintenance Building, 6150 North Matthews Drive
Vectren 02-600657430-5520185 9
Duke 4030-2802-01-9

Waste Water Treatment Plant, 7568 Red Hill Road
SCI REMC 1888000200

Fire Station 7, 5080 West State Road 46
Vectren 02-600564881-5761143 3
Duke 0690-3551-01-0

Fire Station 8, 900 North Curry Pike
Vectren 02-600044084-5130023 0
Duke 1740-2808-01-2

Fire Station 8 Radio Building
Duke 9740-3773-01-1

Ellettsville Street Department, 106 South Park Street
Vectren 002-600564881-5520162 0
Duke 8240-2805-01-0

Ellettsville Police Station, 1406 West Temperance
Duke 4040-3559-01-8

Town Hall, 221 Sale Street
Duke 7000-2803-01-0

Street Lights

Sycamore Drive - SCI REMC [2077801100](#)
Briargate - Duke 7100-2674-01-1
400 Main Street – Duke 1000-3568-01-1
302 Main Street – Duke 2000-3568-01-7
1101 Main Street – Duke 4000-3568-01-8
1123 Main Street – Duke 5000-3568-01-3
Vine Street Parking Lot – Duke 2210-2803-01-2
103 Temperance – Duke 9990-3567-01-1
Sale Street – Duke 5330-3641-01-3
Street Light – Duke 1590-2673-01-3
Street Light – Duke 2590-2673-01-9

Appendix X Preliminary Program Budget

Item	Price	Unit	Quantity	Total
Kilowatt meters	\$25	ea	50	\$1,250
Thermal camera	\$5,000	ea	1	\$5,000
LED bulbs	\$16	ea	500	\$8,000
Intern (2 interns, 2 years)	\$12	per hour	2,080	\$24,960
Infrared flyover of Monroe County to detect energy inefficient structures	\$15,000	ea	1	\$15,000
Marketing materials and advertising				\$10,000
Postage and admin				\$1,000
Website development				\$5,000
Total				\$70,210